

Elna 8006

EnVision



INSTRUCTION MANUAL

elna
SWISS DESIGN

INSTRUCTION BOOK

MODEL 8006

IMPORTANT SAFETY INSTRUCTIONS

Your Elna model 8006 sewing machine is designed and constructed for **HOUSEHOLD use only. Read all instructions before using this sewing machine.**

DANGER — To reduce the risk of electrical shock:

1. Your sewing machine should never be left unattended when plugged in. Always unplug the machine from the electrical outlet immediately after using and before cleaning.
2. Always unplug before replacing light bulb. Replace bulb with same type rated 13.2 Volts D.C. 3 watts.
3. Do not reach for the machine if it has fallen into water. Unplug immediately.
4. Do not place or store machine where it can fall or be pulled into a tub or sink. Do not place it in or drop it into water or other liquid.

WARNING — To reduce the risk of burns, fire, electrical shock or injury:

1. Do not allow the machine to be used as a toy. Supervision is necessary when this machine is used by or near children.
2. Use this machine only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as described in this manual.
3. Never operate this machine if it has a damaged cord or plug, is not working properly, has been dropped or damaged, or dropped into water. Return the machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. This machine is equipped with a special connection cord which, if damaged, must be replaced by an identical cord. This can be obtained from your dealer.

5. Never operate the machine with any air opening blocked. Keep ventilation openings of the sewing machine and foot control free from accumulation of lint, dust and fibers.
6. Never drop or insert any object into any opening.
7. Do not use outdoors.
8. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
9. To disconnect, turn machine off, then remove plug from outlet.
10. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
11. Keep fingers away from all moving parts. Special care should be used around the sewing machine needle.
12. Always use the proper needle plate. The wrong plate can cause the needle to break.
13. Do not use bent needles.
14. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
15. Switch the machine off when making any adjustment in the needle area, such as threading needle, changing needle, threading bobbin, changing presser foot, etc.
16. Always unplug the sewing machine from the electrical outlet when removing covers, lubricating or when making any other servicing adjustments mentioned in the instruction manual.

SAVE THESE INSTRUCTIONS

IMPORTANT

Be sure to keep machine away from static electricity, heat sources, humidity and direct sunlight. When using your sewing machine the first few times, place waste fabric under the presser foot and run the machine without thread for a few minutes. Wipe away excess oil.

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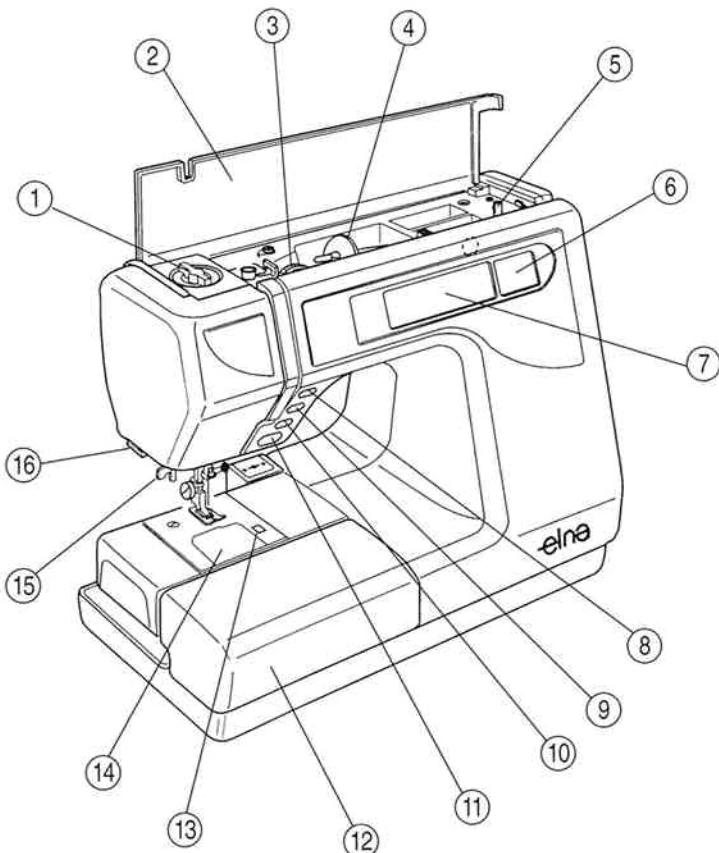
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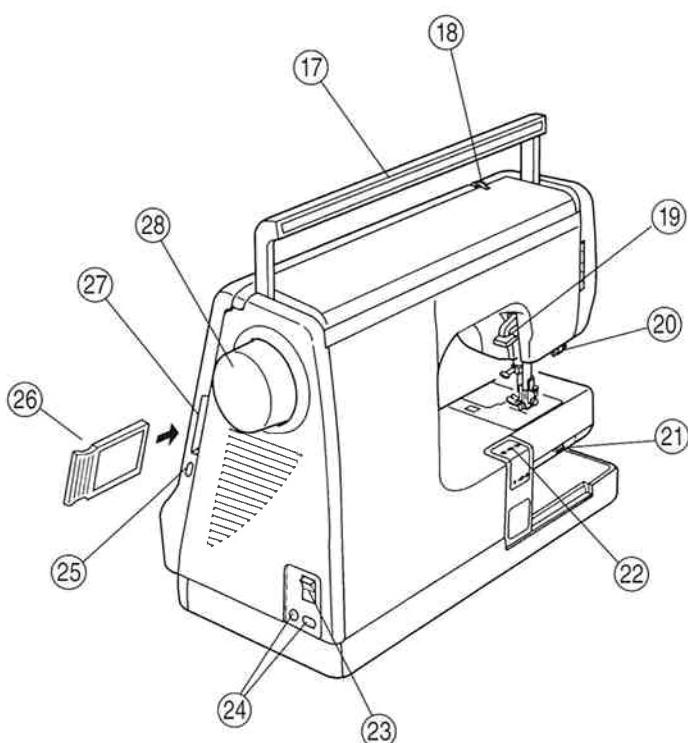
SECTION I

Machine Parts and Functions

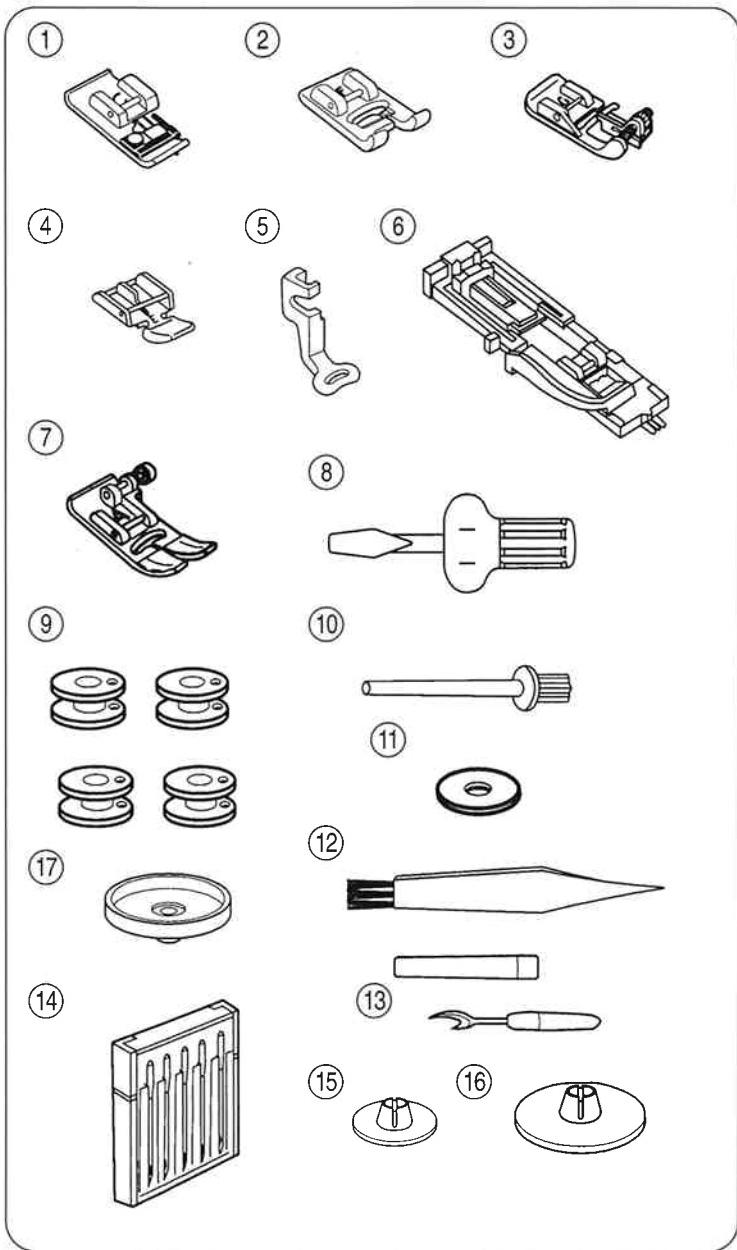


Part Names

1. Foot pressure dial
2. Top cover
3. Thread tension dial
4. Spool holder (Large)
5. Bobbin winder spindle
6. Program panel keys
7. Computer display screen
8. Up/down needle key
9. Auto-lock key
10. Reverse key
11. Start/stop key
12. Extension table (Accessory storage box)
13. Bobbin cover plate release button
14. Bobbin cover plate
15. Needle threader
16. Thread cutter

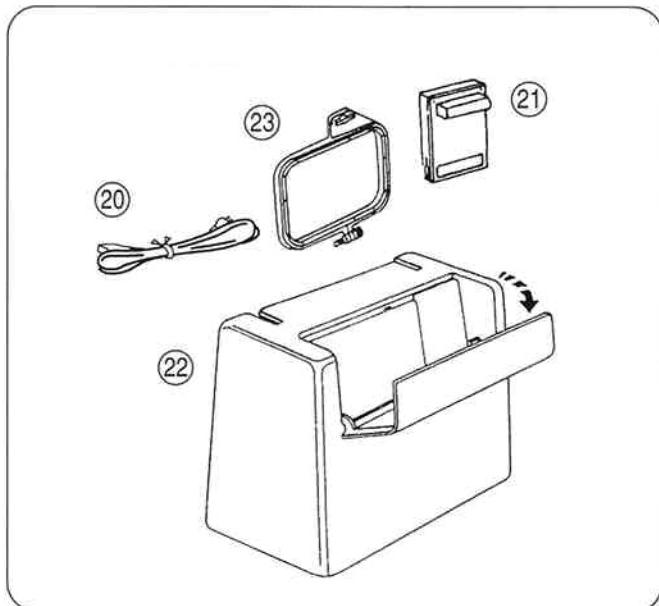
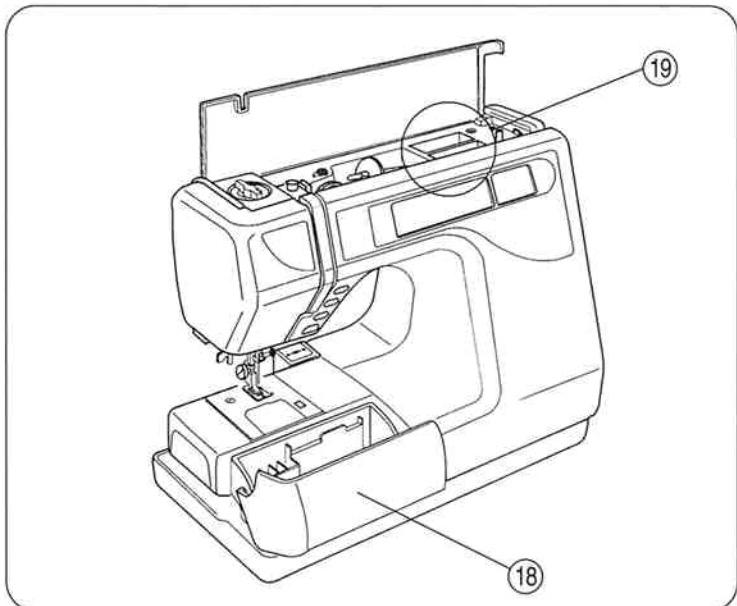


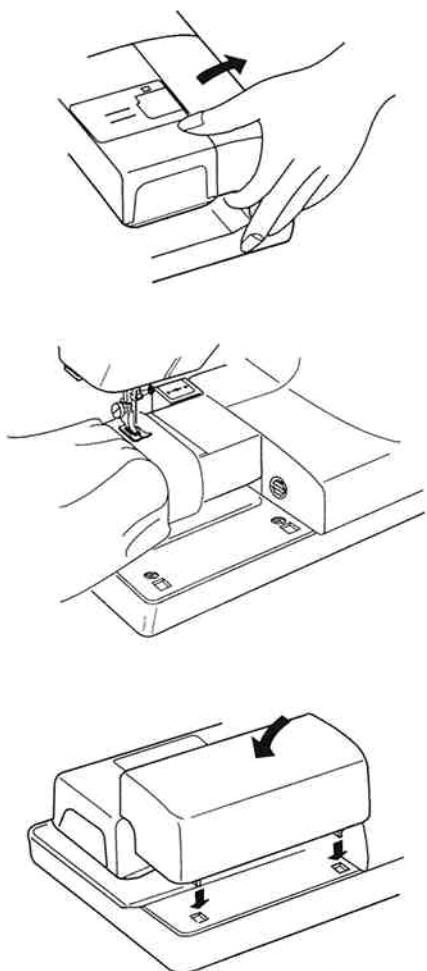
17. Carrying handle
18. Thread take-up lever
19. Presser foot lever
20. Buttonhole lever
21. Feed dog lever
22. Carriage
23. Power switch
24. Machine sockets
25. Card eject button
26. EnVision Card
27. EnVision Card slot
28. Flywheel



Standard Accessories

1. C: Overlock foot
2. F: Satin stitch foot
3. G: Blind hem foot
4. E: Zipper foot
5. P: Embroidery foot
6. R: Automatic buttonhole foot
7. A: Metal foot
8. Screwdriver
9. Bobbins
10. Additional spool pin
11. Spool pin felt
12. Lint brush
13. Seam ripper
14. Set of needles
15. Small spool holder
16. Large spool holder
17. Spool stand
18. Extension table (Accessory storage box)
19. Foot compartment
20. Power supply cord
21. Foot control
22. Carrying case
23. Embroidery hoop No. 1





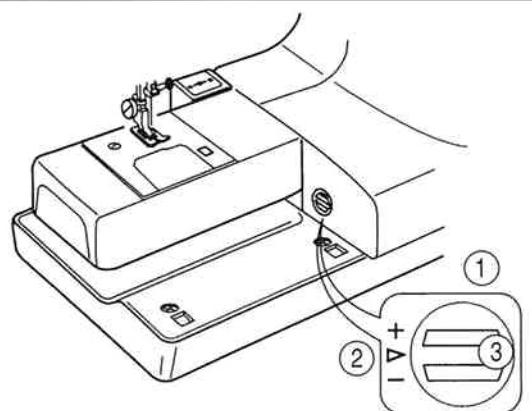
Extension Table (Accessory Storage Box) and Free Arm

Lift the extension table up from the machine to expose the free arm.

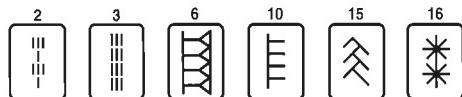
Advantages of free arm sewing:

- For stitching sleeves, waistbands, pants legs or any circular garment area
- For darning socks or mending knees, elbows or worn areas in children's clothing

Attach the extension table for a large sewing surface. Position the tabs on the base grooves and push down gently.



TOO SHORT CORRECT TOO LONG



Using the Fine Adjustment Dial

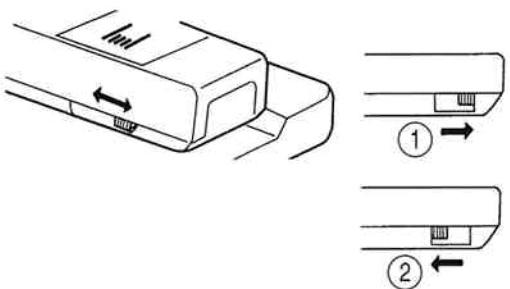
Choice of fabrics and threads may affect the stitch formation. The fine adjustment dial may be used to either lengthen or shorten the stitch.

- ① Fine adjustment dial
- ② Standard mark
- ③ Setting mark

To fine tune the stitch, use a screwdriver to move the setting mark.

If stitches are too short, correct by turning the dial in the direction of "+".

If stitches are too long, correct by turning the dial in the direction of "-".

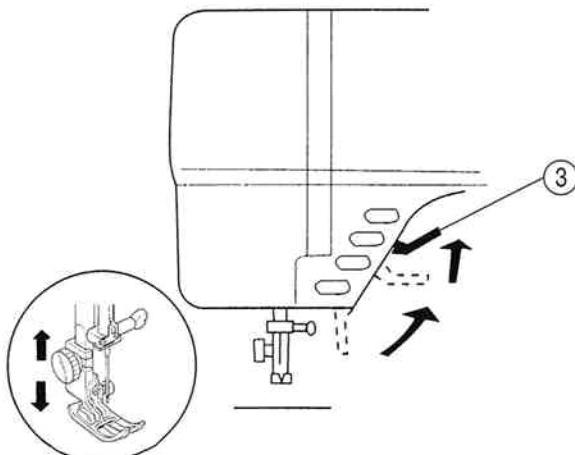


How to Drop the Feed Dog

The feed dog drops out of position for hoop embroidery sewing and special sewing techniques: free motion embroidery, button sewing, etc.

The feed dog must always be up for traditional sewing. Locate the feed dog lever on the back of the free arm. Slide the lever either to the right (down) or to the left (up).

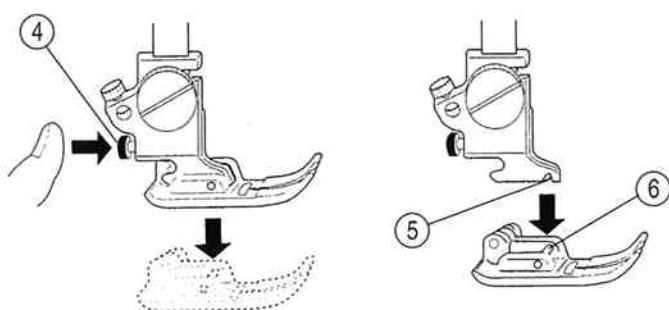
- ① Raised position
- ② Lowered position



Additional Presser Foot Clearance

You can raise the presser foot about 6.5 mm (1/4") higher than the normal up position for easy removal of the presser foot, to place heavy fabrics under the presser foot, or when moving the hoop under presser foot. Pull up the presser foot lever beyond the normal up position.

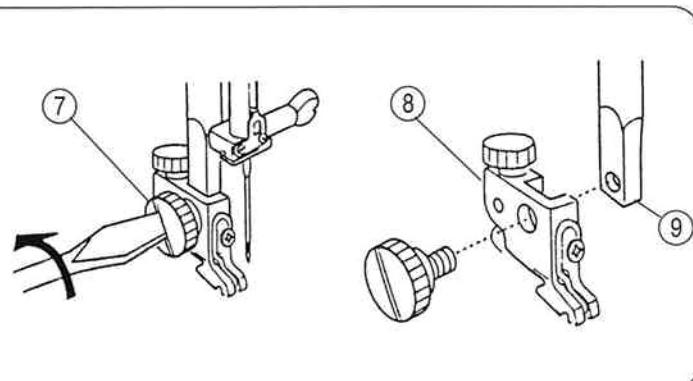
- ③ Presser foot lever



Attaching and Removing Presser Feet

Press the red button on back of the shank. The presser foot will drop off. Place the selected presser foot so the pin on the foot lies just under the groove of the shank. Lower the presser bar to attach the foot.

- ④ Red button
- ⑤ Groove
- ⑥ Pin



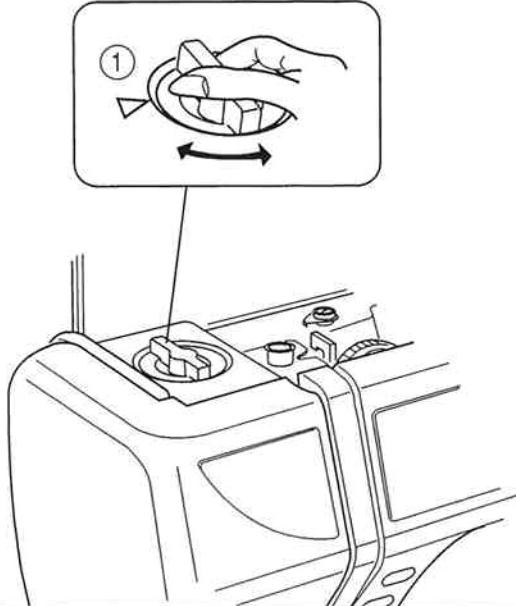
Attaching and Removing the Shank

The shank is removed by turning the thumbscrew counter-clockwise with the screwdriver.

- ⑦ Thumbscrew

When attaching, match the hole in the shank with the hole in the presser bar. Put thumbscrew into hole. Tighten thumbscrew by turning it clockwise.

- ⑧ Shank
- ⑨ Presser bar

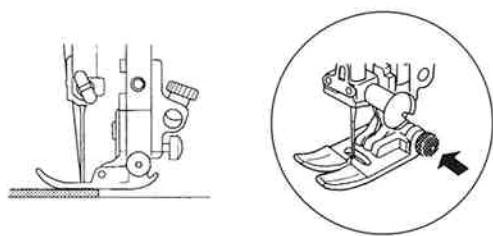


Foot Pressure Dial

The foot pressure dial should be set at "3" for traditional sewing. Reduce the pressure to "2" for applique, cutwork, drawn work, basting and embroidery.

Velours and knits with a lot of stretch may require a "1" setting.

① Setting mark

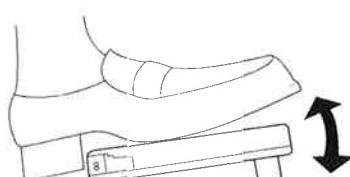


Sewing on Heavy Fabrics

The black button on presser foot A locks the foot in a horizontal position when pushed in before lowering the presser foot. This ensures even feeding at the beginning of seams and helps when sewing many layers of fabric such as welt seams used to hem jeans.

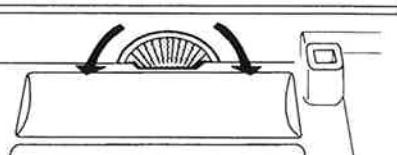
When the point of an increased thickness is reached, lower the needle and raise the presser foot. Press in the black button. Lower the foot and continue sewing.

This button releases automatically after a few stitches have been sewn.



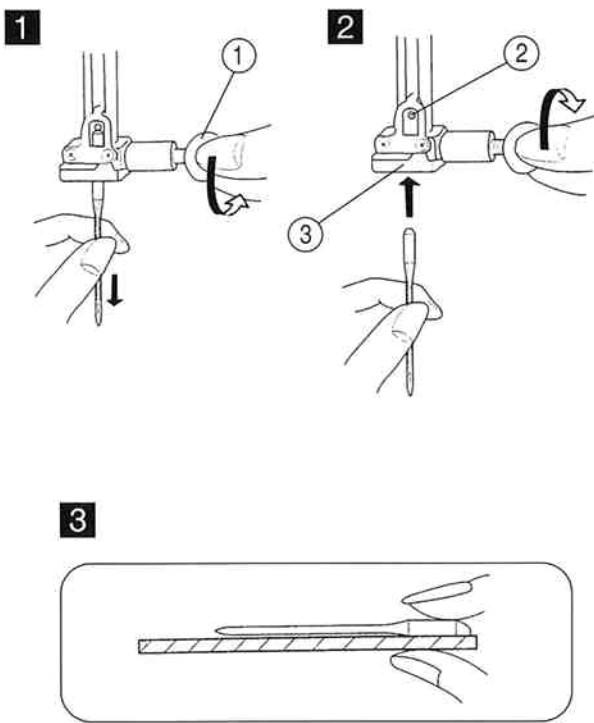
Controlling Sewing Speed

Sewing speed varies with the foot control. The harder you press on the foot control, the faster the machine runs.



Computer Display Screen Brightness Control

Display screen lightens or darkens for visibility by turning the dial located under the top cover in front of the foot compartment.

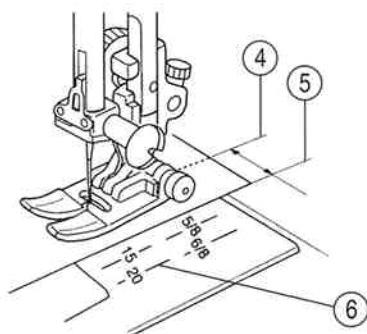


Changing Needles

- 1** Raise the needle by pressing the up/down needle key. Lower the presser foot.
Turn off the power switch.
Loosen the needle clamp screw by turning it counterclockwise.
① Needle clamp screw

- 2** Remove the needle from the clamp. Insert the new needle into needle clamp with flat side to the back.
When inserting the needle into the clamp, push it up as far as it will go and tighten the clamp screw firmly.
② Needle insertion view hole
③ Needle clamp

- 3** To determine if the needle is defective, place the flat side of the needle onto something flat (a needle plate, glass, etc.).
The gap between the needle and the flat surface should be consistent. Never use a bent or blunt needle. It may cause skipped stitches or thread breakage. Defective needles can ruin the fabric.
Always purchase good quality needles. Change needle often.



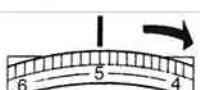
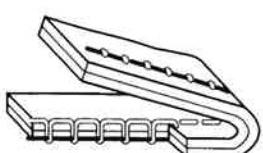
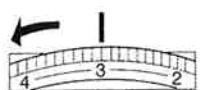
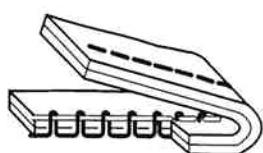
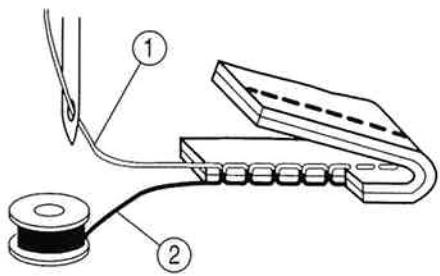
Seam Allowance Lines

The lines on the needle plate and bobbin cover plate help you measure seam width.

- The number indicates the distance between the center needle position and the seam allowance line.

	Millimeters		Inches	
Lines on needle plate	15	20	4/8"	5/8"

- ④** Center needle position
- ⑤** Edge of fabric
- ⑥** Needle plate guide lines



Thread Tension Dial

- **Choosing the Correct Tension**

Straight Stitch

The ideal straight stitch will have threads locked between the two layers of fabric, as shown left (magnified to show detail).

If you look at the top and bottom of the stitch, you will notice that there are no gaps; each stitch is smooth and even.

When adjusting needle thread tension, the higher the number, the tighter the needle thread.

Results depend on:

- stiffness and thickness of fabric
- number of fabric layers
- type of stitch

- ① Needle thread (Top thread)
- ② Bobbin thread (Bottom thread)
- ③ Higher numbers (Tighten)
- ④ Lower numbers (Loosen)

- **Tension is too tight**

The bobbin thread shows through on the top side of the fabric and it will feel bumpy.

Turn the dial to the left to loosen the needle thread tension.

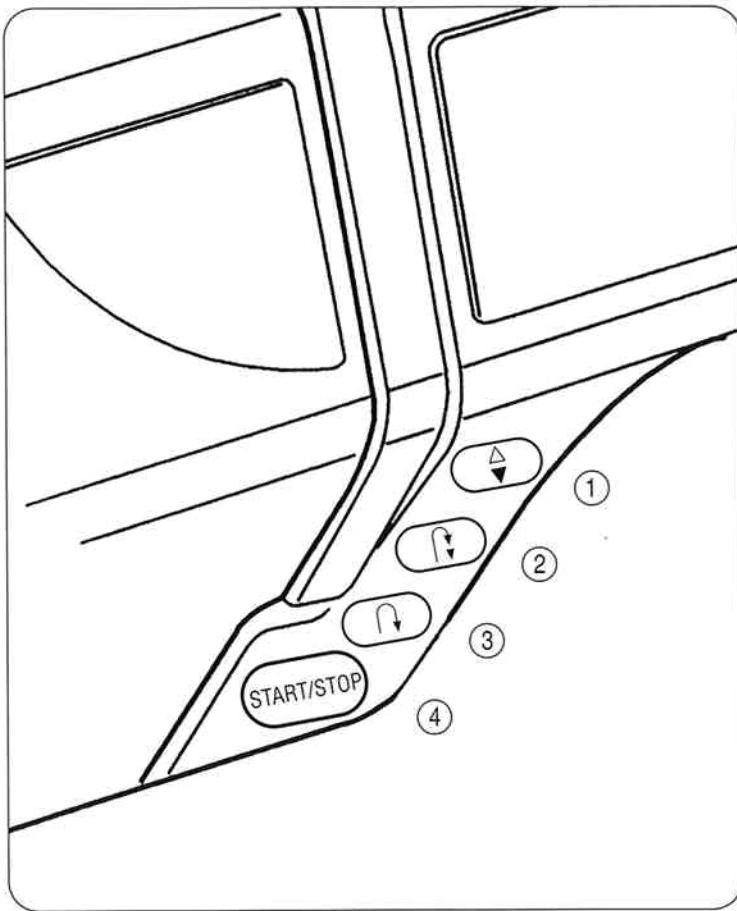
Solution: Lower numbers (Loosen)

- **Tension is too loose**

The needle thread shows through on the underside of the fabric and it will feel bumpy.

Turn the dial to the right to tighten the needle thread tension.

Solution: Higher numbers (Tighten)



FUNCTION KEYS

① Up/Down Needle Key

When you press this key:

if the needle is up, the needle will immediately go to its lowest position.

If the needle is down, the needle will immediately go to its highest position.

② Auto-Lock Key

Press this key while sewing a straight stitch, zigzag stitch or multiple zigzag stitch (Stitches 1, 4 and 5) and the machine will sew a few stitches in place and stop automatically. Press this key while sewing utility or decorative stitches and the machine will complete the stitch, lockstitch and stop.

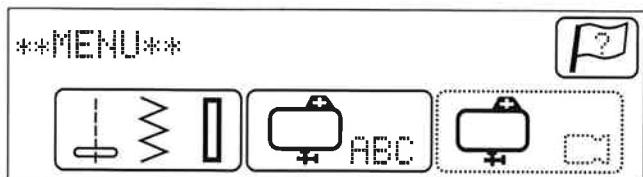
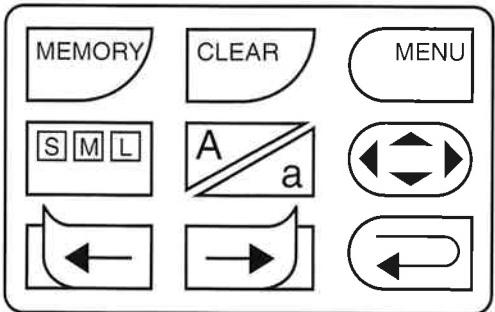
③ Reverse Key

If you are sewing a straight stitch, zigzag stitch or multiple zigzag stitch (Stitches 1, 4 and 5), press and hold the reverse key. The machine will sew in reverse until you release the key.

If you are sewing utility or decorative stitches, when you press this key the machine will immediately stop and sew a locking stitch.

④ Start/Stop Key

The start/stop key operates the machine only when sewing large pattern embroidery.



PROGRAM PANEL KEYS

① Memory Key:

The memory key may be used to combine letters and numbers from the built-in monograms. Press the key after selecting a stitch (letter or number) and the stitch will be memorized.

When the key is pressed after selecting another stitch, that stitch will be memorized after the previously memorized stitch.

② Clear Key:

Press the clear key and the last memorized stitch will be cleared (like a backspace).

③ Menu Key:

Press the menu key to return the computer display screen to the menu screen. The menu screen is used to select a sewing mode (traditional, built-in monogram or large pattern embroidery). The menu screen also contains the language selection programming. (Menu screen appears automatically when machine is turned on.)

④ Letter Size Key:

Press the letter size key to change the letter and number size.

L - 30 mm (38/32")

M - 18 mm (22/32")

S - 10 mm (13/32")

⑤ Upper/Lowercase Key:

Press the upper/lowercase key to alternate between uppercase and lowercase letters.

⑥ Sewing and Frame Position Key:

When sewing letters/numbers, there may be a need to sew a second row. Press the sewing and frame position key to align the wording. It is also used to restart large embroidery at the correct position after thread breaks.

⑦ Previous Page Key:

After selecting a specific sewing mode (traditional, built-in monogram or large pattern embroidery), the screens will alternate to show the various stitch options. Press the previous page key to move from screen B to A.

⑧ Next Page Key:

After selecting a specific sewing mode (traditional, built-in monogram or large pattern embroidery), the screens will alternate to show the various stitch options. Press the next page key to move from screen A to B.

⑨ Return Key:

Press the return key and the screen will revert to the last display screen.

Screen Messages

- ① The computer display screen shows "Bobbin winding".

After the bobbin is wound, return the bobbin winder to its original position by moving the spindle to the left.

- ② Raise the needle bar by pressing the up/down needle key.

(This message will appear when the machine is turned on with the needle not in its up position.)

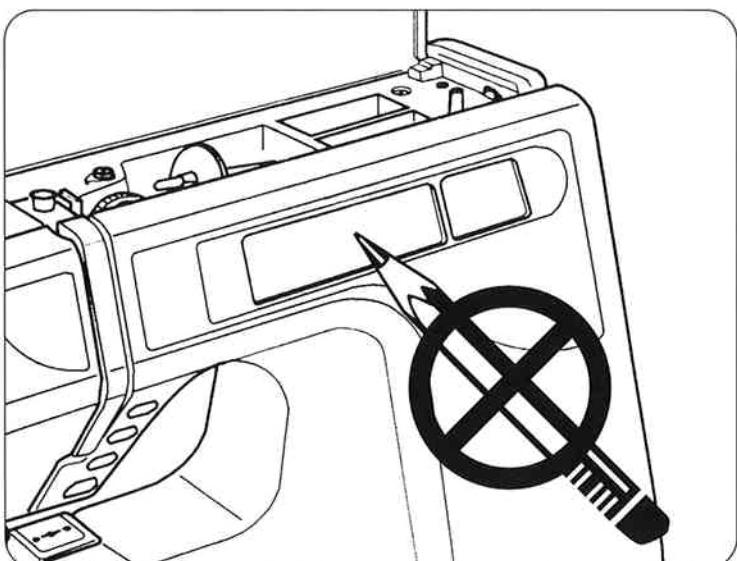
- ③ Turn machine off and insert the EnVision Card again.

- ④ Stop operating the machine until this message disappears (about 15 seconds).

- ⑤ Contact your Authorized Elna Dealer.

CAUTION

- Do not touch the surface of the computer display screen or program panel keys with hard or sharp objects such as pencils or screwdrivers. It is not necessary to press hard on the stitch/function keys; a light touch is all that is needed.
- Use a dry, soft cloth to wipe off the screen.



SECTION II

Getting Ready to Sew

Needle and Thread Selection

In general, fine threads and needles are used for sewing lightweight fabrics and heavier threads and larger needles are used for sewing heavyweight fabrics. There are many specialty needles available from your sewing machine dealer.

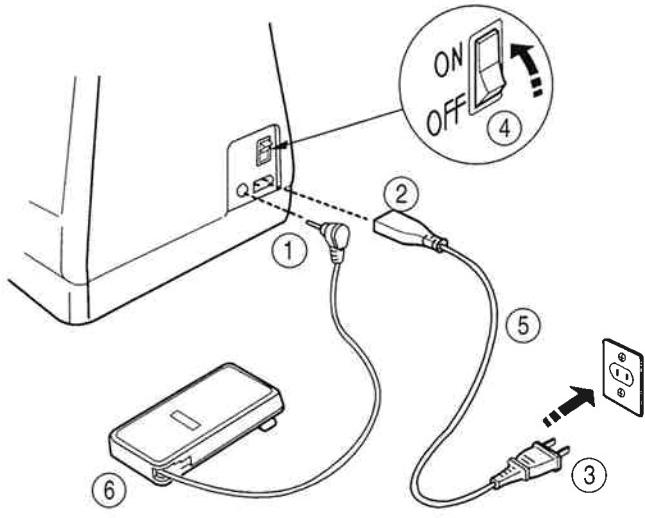
A denim needle with a sharp tip is used to effectively pierce dense fabrics such as denim and canvas. For topstitching, a special topstitching needle with a larger eye accommodates heavier weight thread. Leather needles punch small holes in leather and suede allowing the thread to follow through the hole. Always test thread and needle size on a scrap piece of fabric.

Check your needles frequently for rough or blunt tips. Snags and runs in knits, fine silks and silk-like fabrics are permanent and are often caused by damaged needles.

Always purchase a good quality thread. It should be strong, smooth and consistent in thickness. Use the same thread for needle and bobbin.

When sewing stretch, very fine or synthetic fabrics, use a stretch needle. The stretch needle prevents skipped stitches.

WEIGHT	FABRIC	TYPE OF NEEDLE	NEEDLE SIZE
Very light	Chiffon, Georgette, Fine Lace, Organdy, Tulle	Universal Ball Point	9 (65) 9 (65)
Light	Batiste, Voile, Lawn, Pure Silk, Crepe de Chine, Sheer Crepe, Chambray, Handkerchief Linen, Gingham, Challis, Percale, Wool Crepe, Peau de Soie, Taffeta, Satin, Silk Surah, Satin-backed Crepe, Qiana	Stretch Needle Universal	11 (75) 11 (75) 12 (80)
	Single Knits, Jersey, Swimwear, Tricot	Stretch Needle Ball Point	11 (75) 11 (75)
	Leather, Suede	Wedge Point Leather Needle	11 (75)
Medium	Flannel, Velour, Velvet, Muslin, Velveteen, Poplin, Corduroy, Broadcloth, Linen, Chintz, Gabardine, Felt, Terry, Burlap, Quilted Fabrics	Universal	14 (90)
	Double Knits (synthetic and natural), Stretch Velour, Stretch Terry, Sweater Knits	Ball Point	14 (90)
	Leather, Vinyl, Suede	Wedge Point Leather Needle	14 (90)
Heavy	Denim, Sailcloth, Ticking	Denim Needle	16 (100)
	Double Faced Wool, Heavy Coating, Fake Fur, Drapery Fabrics	Universal	16 (100)
	Leather, Suede	Wedge Point Leather Needle	16 (100)
Very Heavy	Canvas, Duck, Upholstery Fabrics	Universal	18 (110)
	Topstitching for Special Finish	Topstitching Needle	11 (75) 14 (90)



Connecting Machine to Power Supply

Before connecting the power cord, make sure the voltage and frequency shown on the machine are identical to your electrical power.

To connect the foot control, turn off the power switch. Insert the foot control plug and machine plug into the machine and the power supply plug into the wall.

- | | |
|---------------------|---------------------|
| ① Foot control plug | ④ Power switch |
| ② Machine plug | ⑤ Power supply cord |
| ③ Power supply plug | ⑥ Foot control |

For Your Safety

1. While the machine is in operation, always keep your eye on the sewing area and do not touch any moving parts such as the thread take-up lever, flywheel or needle.
2. Always turn off the power switch and unplug from the power supply:
 - when leaving the machine unattended
 - when attaching or removing parts
 - when cleaning the machine.
3. Do not place anything on the foot control.

Operating Instructions:

The "O" symbol on the power switch indicates the OFF position.

For certain countries, your machine may come equipped with a polarized plug (one prong wider than the other). This plug is intended to fit into a polarized outlet. If the plug does not fit fully into the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.

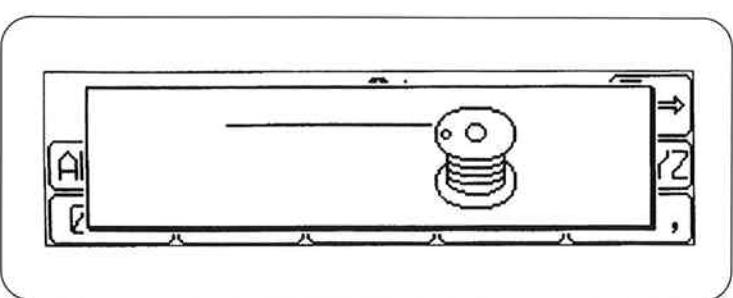
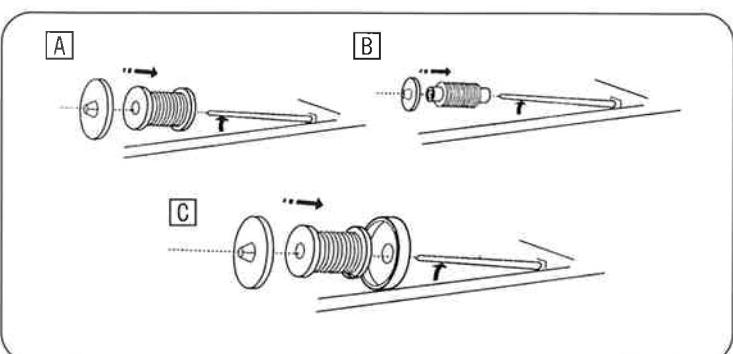
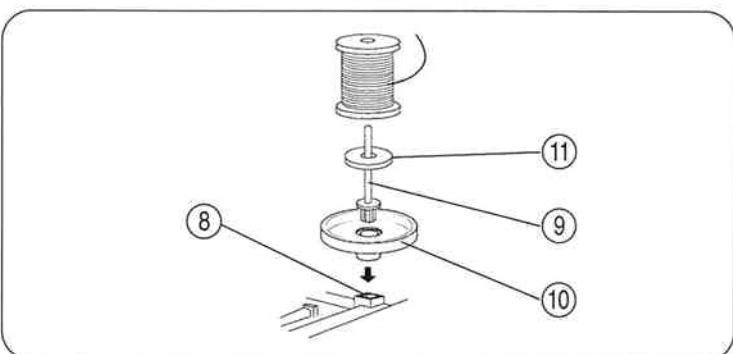
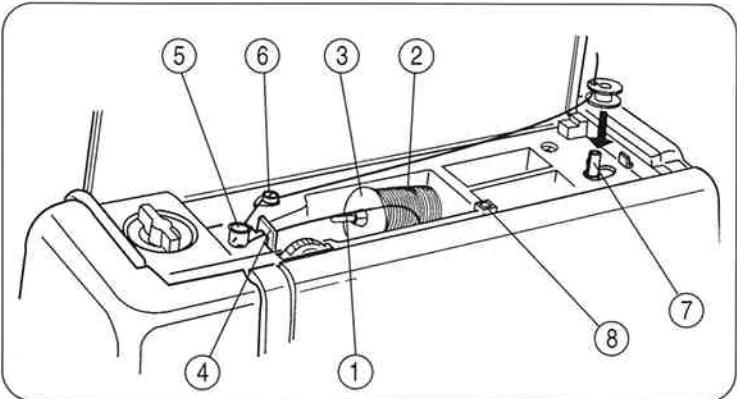
- NOTE:**
- After turning off the machine, wait 5 seconds before turning it on.
 - A slight humming noise may be heard from the internal motor while the machine is turned on. This is normal.

Language Selection

There are eight languages built into the programming. Turn on the machine and the computer display screen shows the main menu. To change the language:



- ⑦ Press key on the MENU screen. (Eight languages will appear on the screen.)
- ⑧ Select desired language.
- ⑨ Press key. The display screen will automatically revert to MENU screen.



Winding the Bobbin

Lift up the spool pin. Place the spool of thread on the spool pin with the thread coming off the spool as shown. Attach the large spool holder and press it firmly against the spool of thread. (The small spool holder is used with narrow or small spools of thread.)

Slide the thread under the thread guide hook, around the upper thread guide and the bobbin winder thread guide. Pass the thread through the hole in the bobbin from the inside to the outside. Place the bobbin on the bobbin winder spindle and push it to the right.

- | | |
|---|---|
| ① Spool pin
② Spool of thread
③ Large spool holder
④ Thread guide hook
⑤ Upper thread guide
⑥ Bobbin winder thread guide | ⑦ Bobbin winder spindle
⑧ Additional spool pin hole
⑨ Additional spool pin
⑩ Spool stand
⑪ Spool pin felt |
|---|---|

The additional spool pin may be used to wind an extra bobbin without unthreading the machine.

Procedure – insert the spool stand and the additional spool pin in the hole. Place the felt and spool on the pin with the thread coming off the spool as shown.

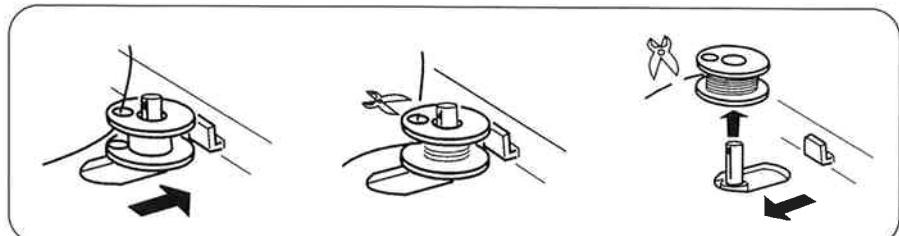
- ⑩ Spool stand ⑪ Spool pin felt

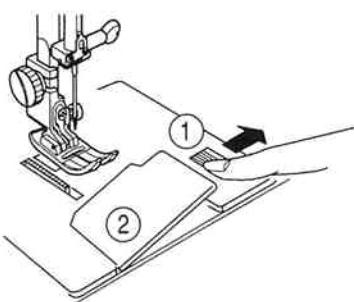
NOTE: Spool holder needs to be changed according to the type of thread spool.

- Large spool
- Small spool
- Should the thread tangle around the spool pin, use the spool stand.

The computer display screen will show a bobbin winding. Holding the free end of the thread, press the foot control. Stop the machine when it has made a few turns and cut the thread close to the hole in the bobbin. Press the foot control again. When the bobbin is fully wound, it will stop automatically.

Return the bobbin winder to its original position by moving the spindle to the left and cut the thread as shown. The machine will not sew until the spindle is moved to the left.

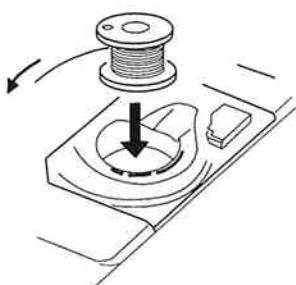




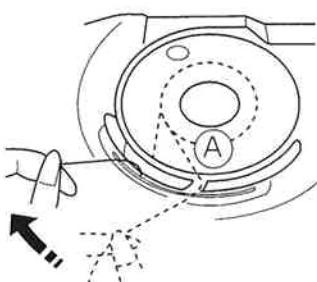
Inserting the Bobbin

Gently slide the bobbin cover plate release button to the right and remove the cover plate. Lift out the bobbin.

- ① Bobbin cover plate release button
- ② Bobbin cover plate

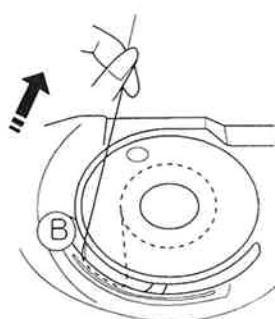


Place the bobbin in the bobbin case with the thread running counterclockwise.



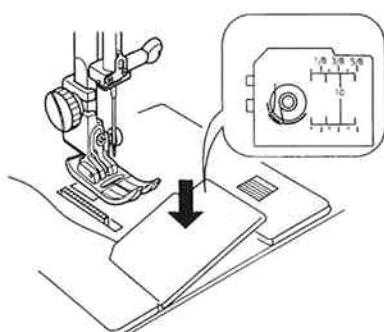
Guide the thread into notch A on the front side of the bobbin case.

Hold the bobbin with your right hand and pull the thread to the left, through the tension spring blades.



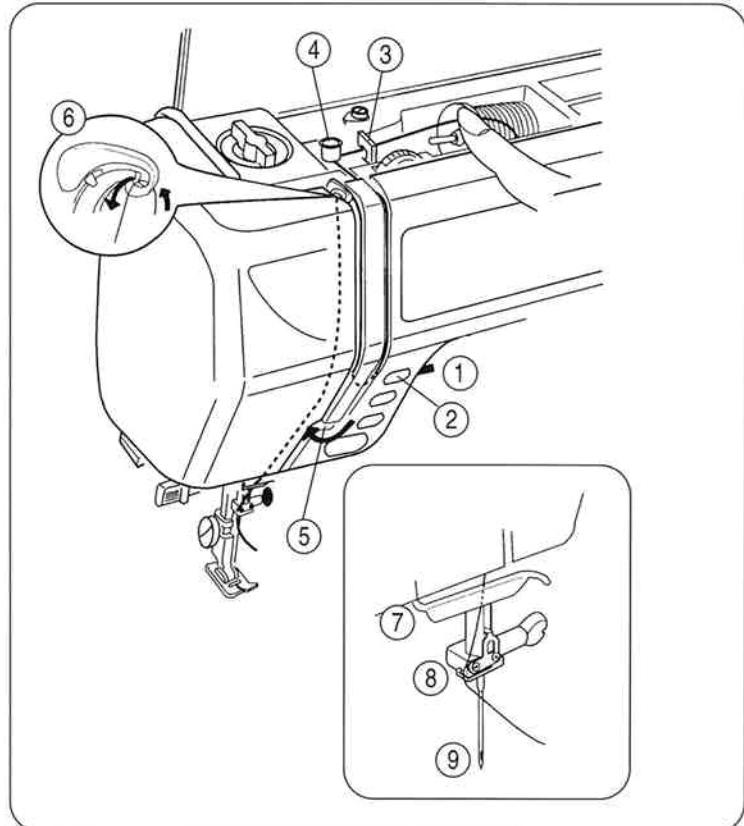
Continue pulling the thread lightly until the thread slips into notch B.

Pull out about 15 cm (6") of thread.



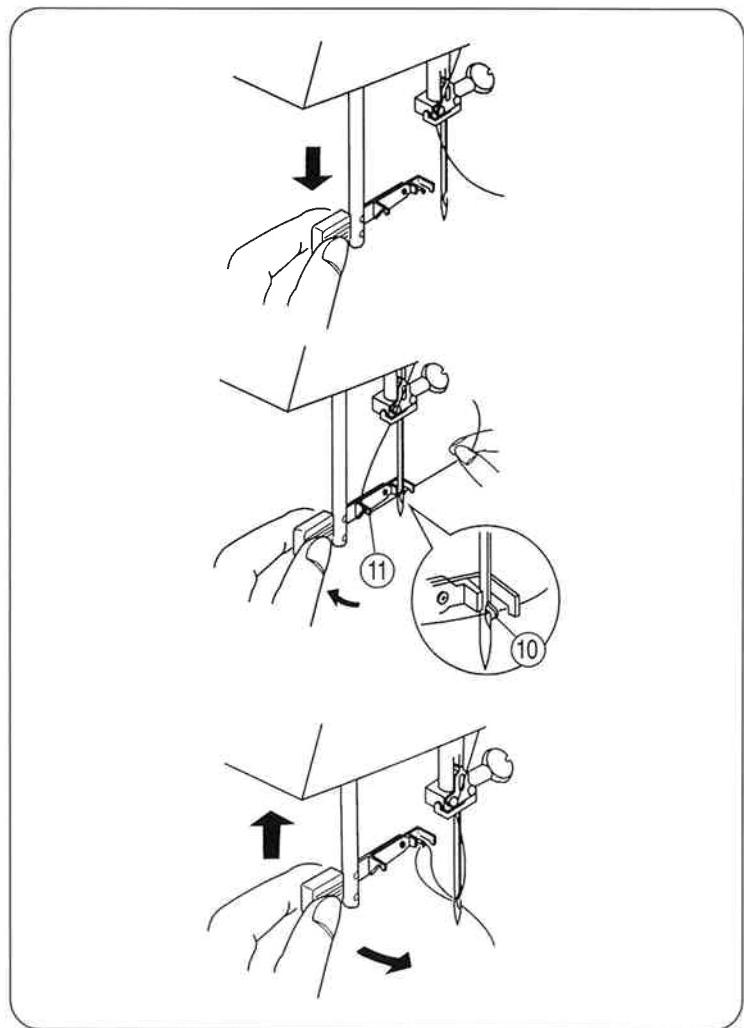
Replace the bobbin cover plate.

Check the threading by referring to the chart shown on the bobbin cover plate.



Threading the machine

- ① Raise the presser foot.
- ② Press the Up/Down needle key until the needle is in an up position.
- ③ Slide the thread under the thread guide hook.
- ④ Pull the thread around the upper thread guide.
- ⑤ Guide the thread down and around the checkspring holder.
- ⑥ Firmly pull the thread from right to left, over the take-up lever and down into the take-up lever eye.
- ⑦ Proceed down through the lower thread guide.
- ⑧ Slide the thread to the left behind the needle bar thread guide.
- ⑨ Thread the needle from front to back or use the automatic needle threader.



Automatic Needle Threader

Raise the needle to its highest position. Lower the needle threader lever as far as it will go.

Turn the lever in the direction of the arrow in the illustration, then insert Hook (10) into the needle eye. Bring the thread around Guide (11) and under Hook (10).

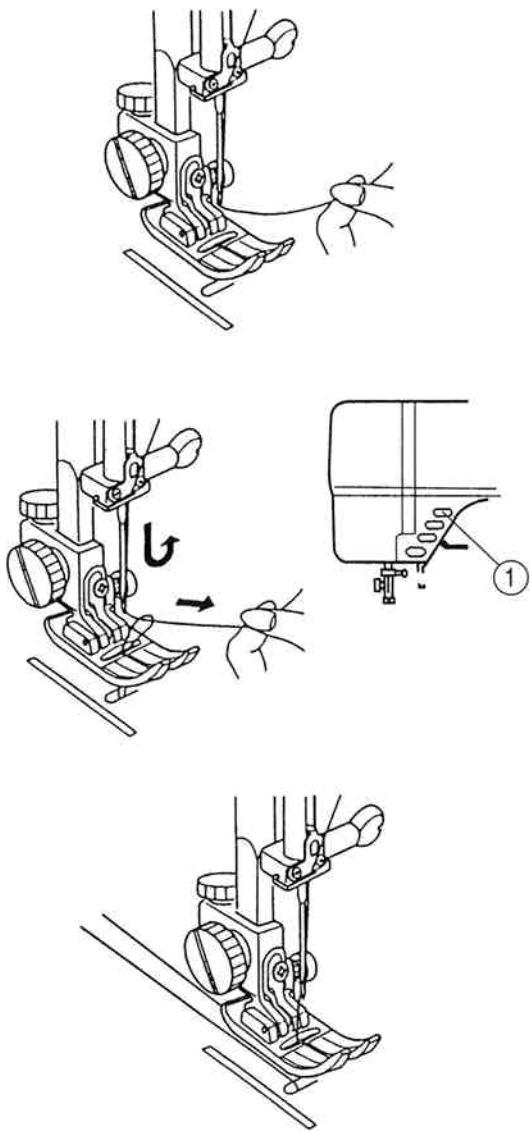
Turn the lever in the direction of the arrow in the illustration, drawing the thread loop through the needle.

Release the lever and let the needle threader return to its original position.

Manually bring the thread through the needle eye by pulling the thread loop to the back.

- The needle threader can be used with #11 to #16 size needles. Thread weight may vary from 30 to 100.

Drawing Up the Bobbin Thread



Raise the presser foot. Hold the needle thread lightly with your left hand.

Press the up/down needle key twice to pick up the bobbin thread. Draw up the needle thread together with a loop of bobbin thread.

① Up/down needle key

Slide 10 cm (4") of both threads to the back under the presser foot.

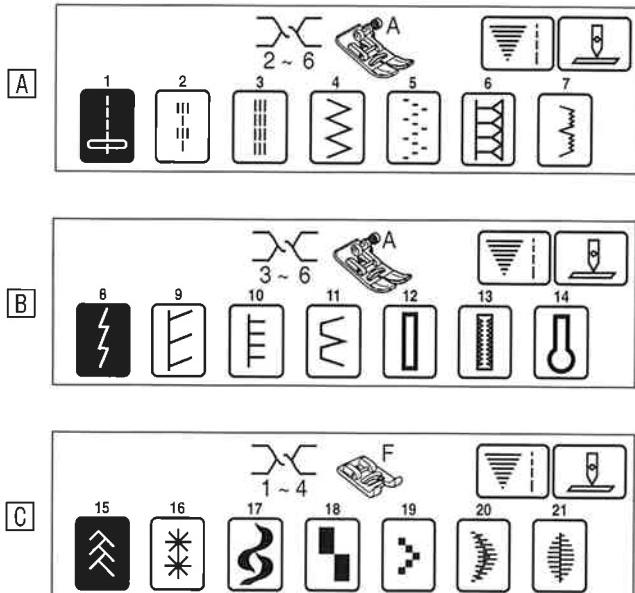
SECTION III

Traditional Sewing

Utility, Buttonhole and Decorative Sewing

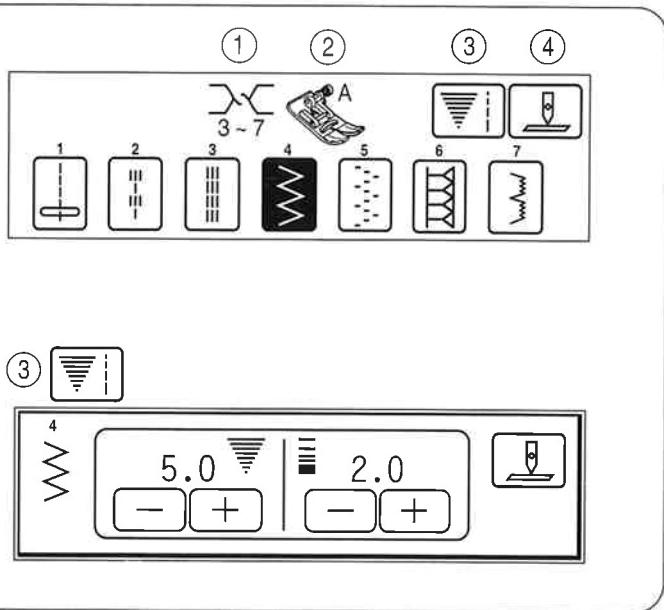
How to select traditional sewing mode.

1. Menu screen is shown on computer display screen.
* See caution note on page 11.
 2. Press the key. Screen A will appear.
 3. Press the key. Screen B will appear.
 4. Press the key. Screen C will appear.
 5. Press the key. Screen B will appear.
 6. Press the key. Screen A will appear.
- Press the key or the key to return to the menu screen.



How to Select a Stitch

Press the stitch key. The key will darken to indicate the stitch has been selected. The screen will also show:



① Where to set the thread tension dial. 3 ~ 7

② An appropriate foot. A

③ Stitch Width and Length Key:

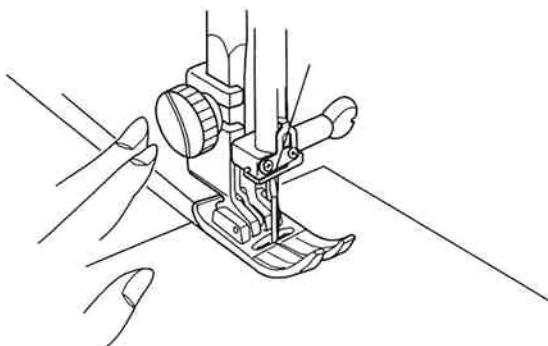
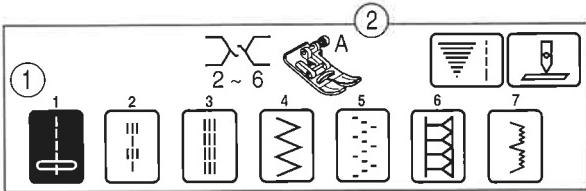
Width and length are automatically set after selecting the stitch. Press the key; the screen will change and the settings may be adjusted. Press the key to return to screen A.

④ Needle Stop Position Key:

This key is very similar to the up/down needle key. The difference is that the needle stop position key only activates the up or down positioning after sewing. The up/down needle key immediately drops or lifts the needle.

Needle will stop down

Needle will stop up



Straight Stitch



Press the key. The machine will sew the straight stitch in the center needle position.

The basic straight stitch is used for sewing seams, zipper insertion, pintucks and rolled hems.

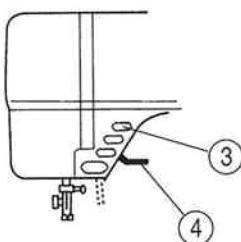
① 1: Straight stitch

② A: Metal foot

Starting to Sew

Raise the presser foot and position the fabric next to a seam allowance line on the needle plate (see page 7). Lower the needle to the point where sewing is to begin.

Pull the threads under the foot towards the back and lower the presser foot. Press the foot control. Gently guide the fabric along the seam allowance line letting the fabric feed naturally.

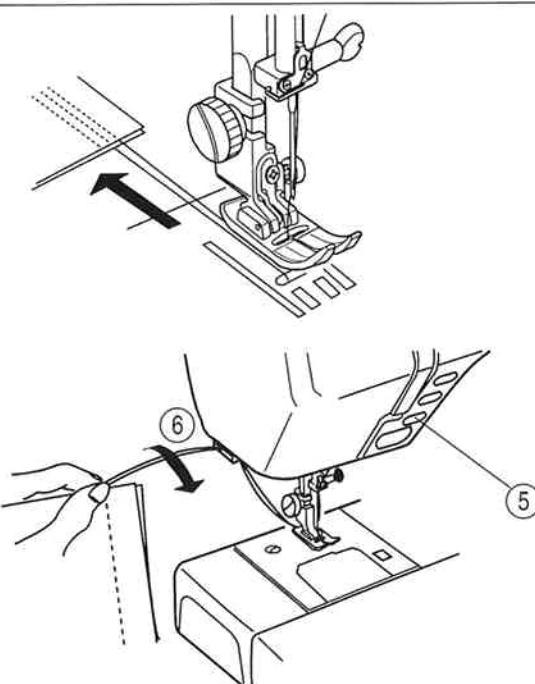


Changing Sewing Direction

Stop the machine and bring the needle down into the fabric by pressing the up/down needle key. Raise the presser foot. Pivot the fabric around the needle to change sewing direction. Lower the presser foot.

③ Up/down needle key

④ Presser foot lever



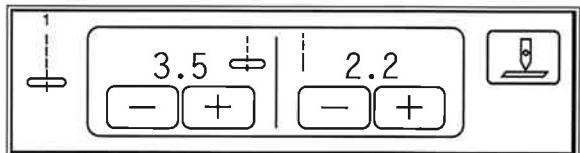
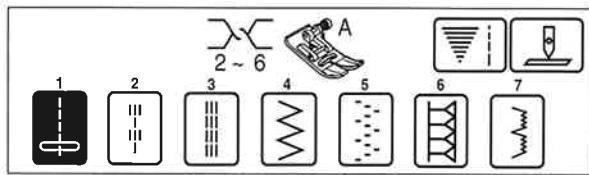
Finishing Off a Seam

To fasten the threads at the end of a seam, press and hold the reverse key while sewing.

Raise the presser foot. Remove the fabric; pull the threads to the back and cut threads using the thread cutter. (The threads are cut the proper length to start the next seam.)

⑤ Reverse key

⑥ Thread cutter



1.5

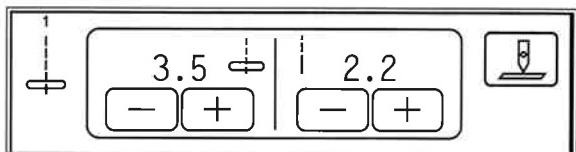
4.5

Adjusting Stitch Length

Press the key. Use the right side keys; press key to decrease and key to increase.

The pre-programmed setting is suitable for most of your sewing needs; sometimes different fabrics require an adjustment to be made.

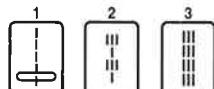
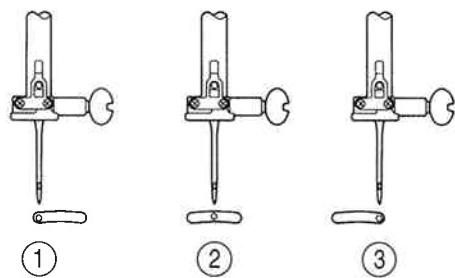
The reverse stitch length will not sew any longer than 3 mm (1/8").



0.0

3.5

7.0



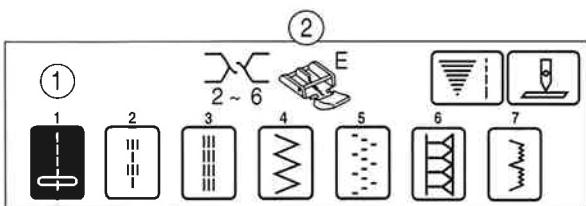
Variable Needle Positions

Stitches 1, 2 and 3 allow you to move the needle to any position. There is a total of 15 needle positions.

Press the key. Use the left side keys; press key to move left and key to move right.

- ① Left position
- ② Center position
- ③ Right position

After adjusting stitch length and needle position, press the key to return to screen A.



Zipper Insertion

① 1: Straight stitch

② E: Zipper foot

Attach the pin on the zipper foot to the groove on the shank.

- To sew the left side of the zipper, attach the zipper foot on the right-hand side.

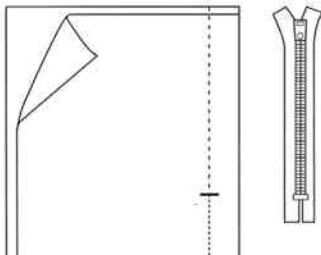
- To sew the right side of the zipper, attach the zipper foot on the left-hand side.

③ Groove

④ Pin

⑤ Sew left side

⑥ Sew right side



Fabric Preparation

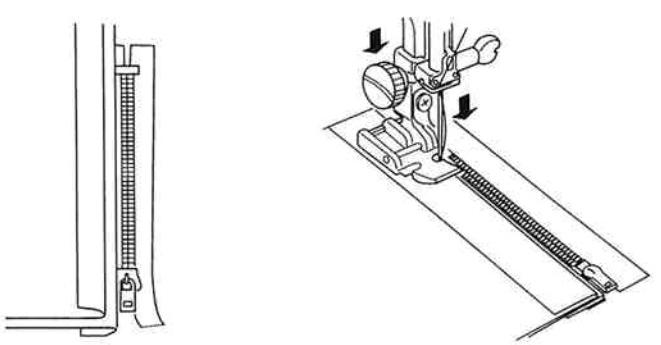
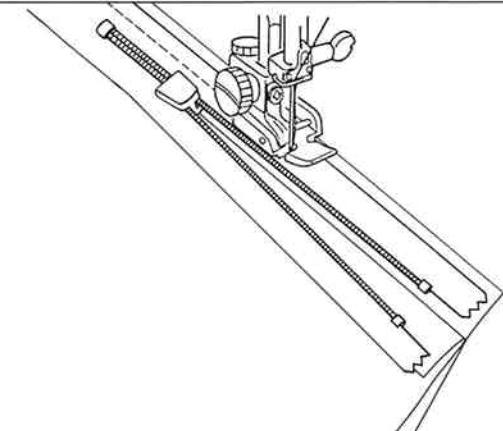
Add 1 cm (3/8") to the zipper size. Use this measurement and mark the opening for the zipper.

Place right sides of fabric together and sew the seam located below zipper placement. (Make sure to reverse sew the stitches directly below the zipper placement.)

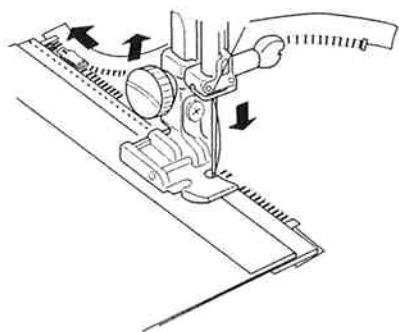
Increase stitch length to 4.5 and baste the zipper opening closed. Press the seam and basting seam open.

Lapped Application

Open zipper and place it face down on the seam allowance. Teeth are on the seam line and zipper top is 1 cm (3/8") from fabric top edge. Attach foot with left side pin. Baste zipper in place, sewing from bottom to top.

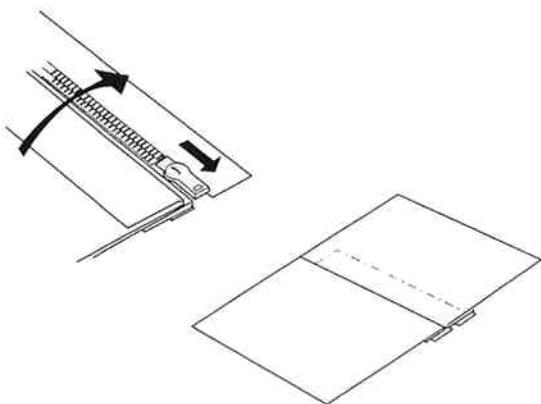


Close zipper. Turn zipper face up (right seam allowance forms a small fold at basting line) and smooth zipper teeth away from seam. Attach foot with right side pin. Reset straight stitch length to 2.2. Starting at the bottom, sew through the folded seam allowance and zipper tape.

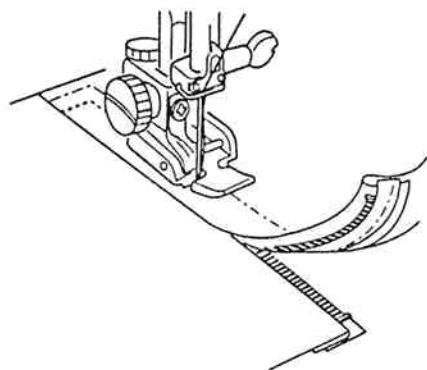


Zipper Sewing, cont'd.

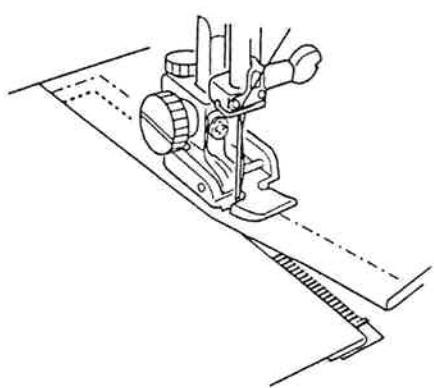
Stop just before the zipper foot reaches the slider on the zipper tape. Lower the needle slightly into the fabric. Raise the zipper foot and open the zipper. Lower the foot and stitch the remainder of the seam.



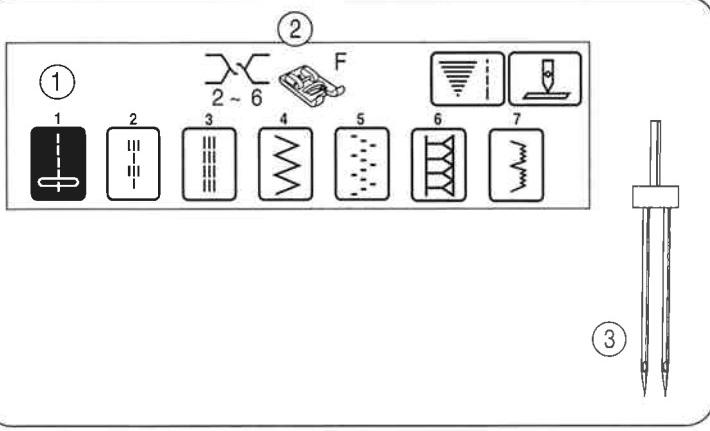
Close the zipper and spread the fabric flat with the right side facing up. Baste through the opened seam allowance and zipper tape.



Move the zipper foot to the left side pin. Guide the edge of foot along the zipper teeth and stitch through the garment and zipper tape. Stop about 5 cm (2") from the top of the zipper.



Slightly lower the needle into the fabric. Raise the foot, remove the basting stitches and open the zipper. Lower the foot and stitch the remainder of the seam, making sure the fold is even.



Twin Needle Hem

A twin needle hem is quick and easy. It is especially useful for very stretchy fabrics. Be sure to use a stretch twin needle for knit fabrics.

Turn off the power switch and insert a twin needle.

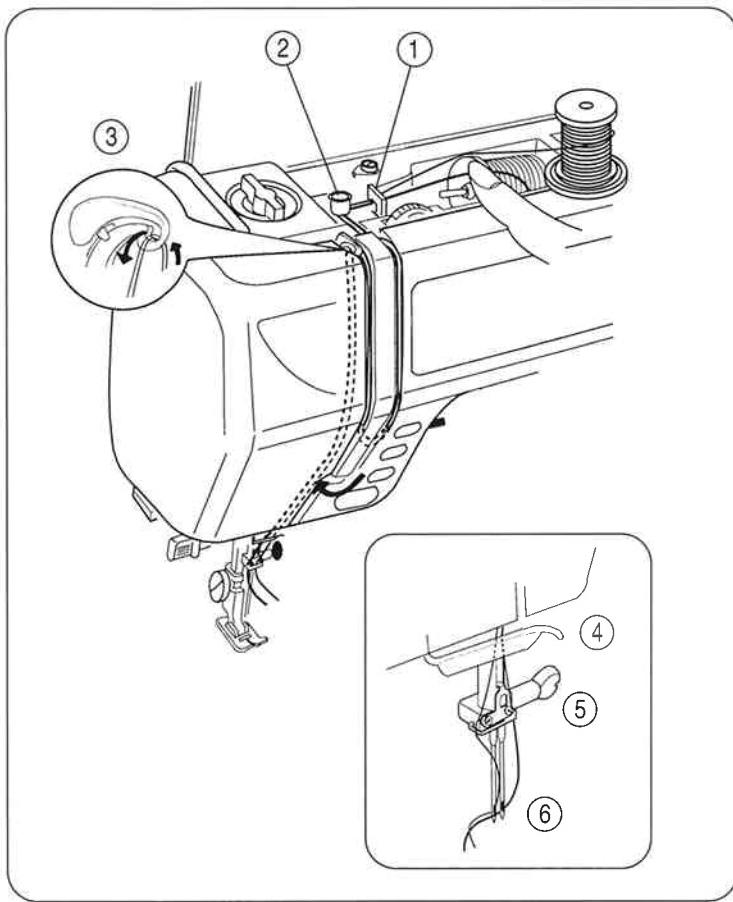
Insert the additional spool pin and put the spool pin felt and second spool on it. (See page 14.)

Use the center needle position.

① 1: Straight stitch

② F: Satin stitch foot

③ Twin needle (stretch twin needle for knits)



Threading the machine

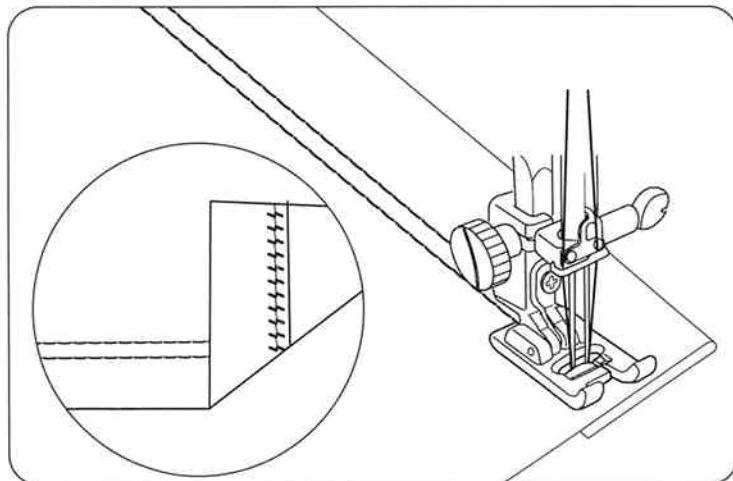
①-③ Thread 1 through 3 in the same manner as single thread. (See page 16.)

④ Draw the threads down and slide them through the right side of the lower thread guide.

⑤ Slide one of the threads through the needle bar thread guide on the left and the other one on the right.

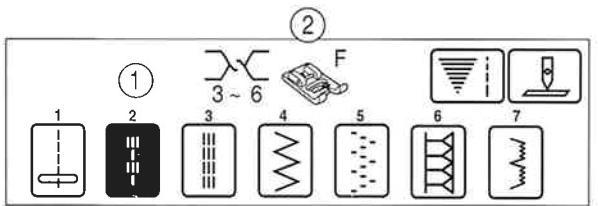
⑥ Thread the needles from front to back.

- The needle threader cannot be used with a twin needle.



Fold the hem up desired amount and topstitch with the twin needle. Carefully trim away excess fabric using sharp scissors. This is an excellent hemming method for knit fabrics because the bobbin thread zigzags, allowing the hem to stretch with the fabric.

Remove twin needle. Set up machine for single needle sewing.



• Sculpture Stitch (Quilt Stitch)

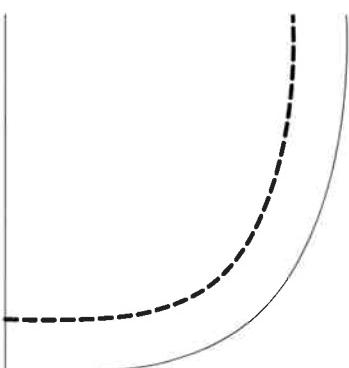
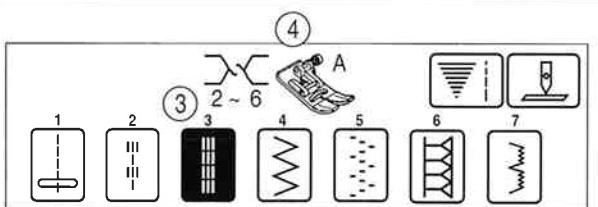
The sculpture stitch adds a three dimensional effect when outlining designs for elegant motifs on clothing, table linens and crafts.

① 2: Sculpture stitch

① F: Satin stitch foot

• Quilt Stitch

You can easily duplicate hand quilted stitches by using monofilament thread in the needle, 60 weight cotton thread on the bobbin, and changing needle tension to 8. (See page 8.)

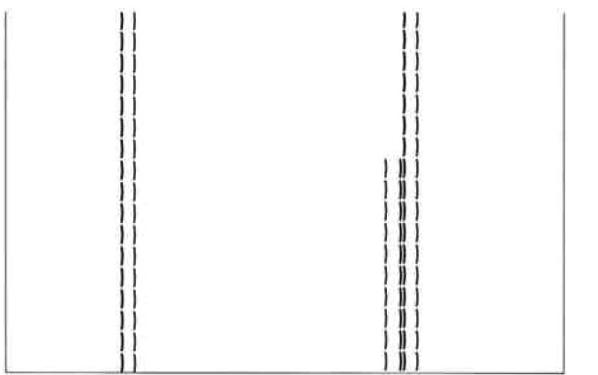
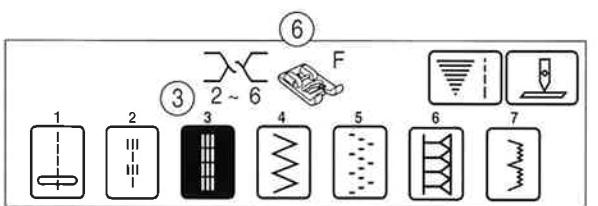


• Triple Straight Stretch Stitch

This strong, durable stitch is recommended where both elasticity and strength are needed to ensure comfort and durability. Use it to reinforce areas such as crotch and armhole seams. Also use for extra strength when constructing items such as backpacks. It is wonderful for topstitching suits, blazers, jumpers, and denim outfits.

③ 3: Triple straight stretch stitch

④ A: Metal foot



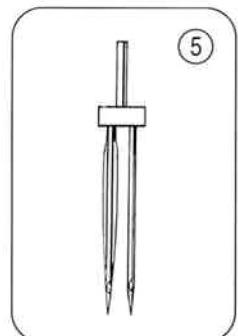
• Triple Straight Stretch Hemstitch

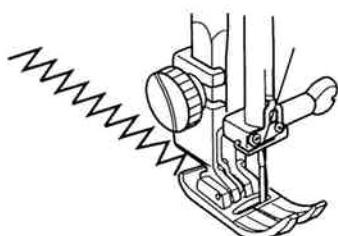
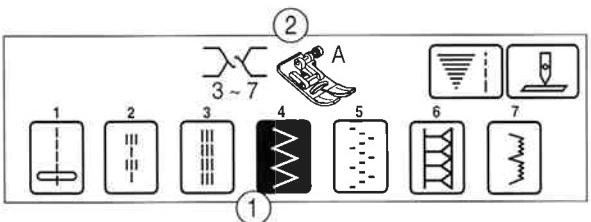
Heirloom sewing is a simple and elegant technique. Your family and friends will be amazed by your sewing expertise. Insert a twin wing needle. Thread machine for twin needle sewing (see page 23) with fine cotton embroidery thread (50 weight or finer) in needles and bobbin. Use spray starch to stabilize fabric. Best sewing results are found on natural fibers such as cotton, linen or a cotton/linen blend. Sew a row of stitches.

Reverse fabric and sew second row of stitches with wing needle re-entering the hole in the first row of stitches.

⑤ Twin wing needle

⑥ F: Satin stitch foot





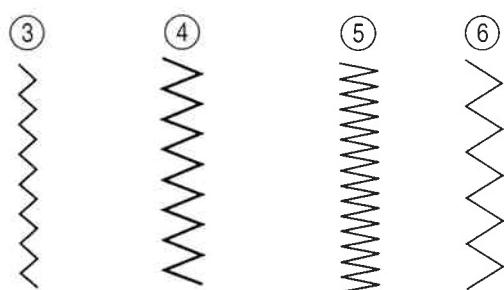
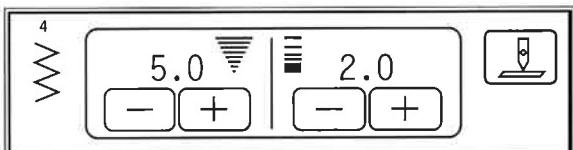
Zigzag Stitch

① 4: Zigzag stitch

② A: Metal foot

The zigzag stitch is a very versatile stitch. Simply change its width and length. Use the zigzag to finish raw edges, roll hems, satin stitch appliques and create beautiful monograms.

- Stabilize stretch fabrics with interfacing before doing applique or free motion embroidery.

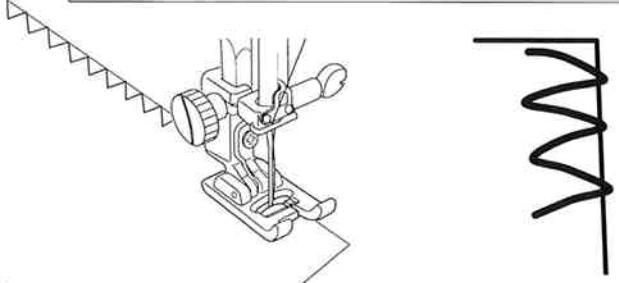
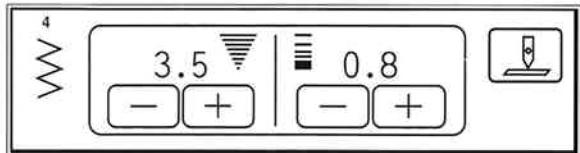
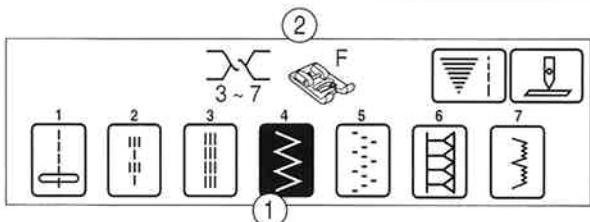


Adjusting Stitch Width and Length

Pre-programmed stitch settings may be changed by pressing the key.

Press the or key to change the stitch width and length.

- ③ Narrower width (lower number)
- ④ Wider width (higher number)
- ⑤ Shorter stitch (lower number)
- ⑥ Longer stitch (higher number)



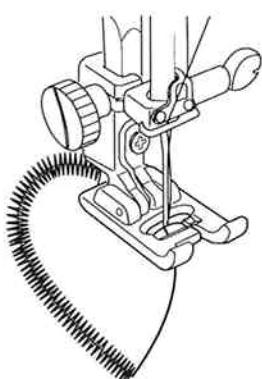
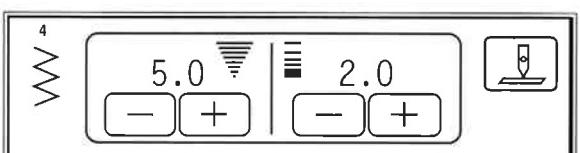
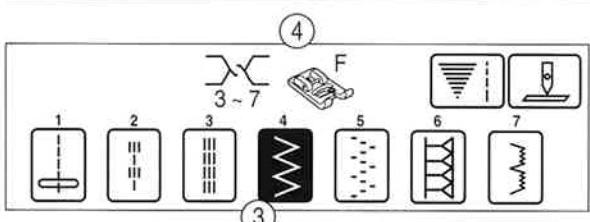
Whip and Roll Hem

This technique produces a beautiful edge on ruffles and hems. Whip and roll is commonly used in heirloom sewing.

The fabric edge must be clean. Lay the fabric edge in the center of the foot. The zigzag will catch the edge on the left and clear the raw edge on the right, rolling the fabric.

① 4: Zigzag stitch

② F: Satin stitch foot



Satin Stitch Applique

The satin stitch is commonly used for applique, monogramming, stems of flowers and petals. Threads of 100% cotton, rayon or silk provide the best results.

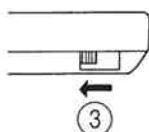
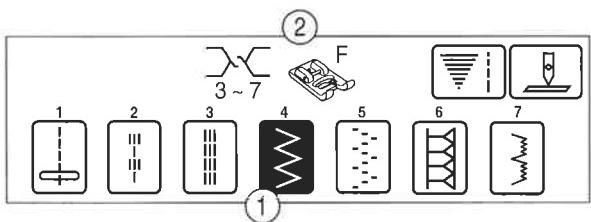
- Apply stabilizer to the fabric for proper stitch formation.

Applique Preparation

- Press fusible webbing to the wrong side of a lightweight fabric.
- Cut out design shape. Fuse design to main fabric.
- Sew design to fabric with the needle swinging off the applique

③ 4: Zigzag stitch

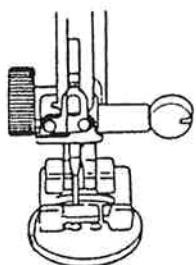
④ F: Satin stitch foot



How to Sew on a Button

- ① 4: Zigzag stitch
- ② F: Satin stitch foot
- ③ Drop feed dog (see page 5)

Set the stitch width according to the position of the holes in the button.

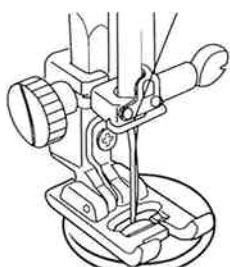


Match the holes in the button to the horizontal slot on the presser foot.

Lower the foot to hold the button in place.

Turn the flywheel by hand until the needle is just above the button.

Press the key to position the needle above the left hole of the button.



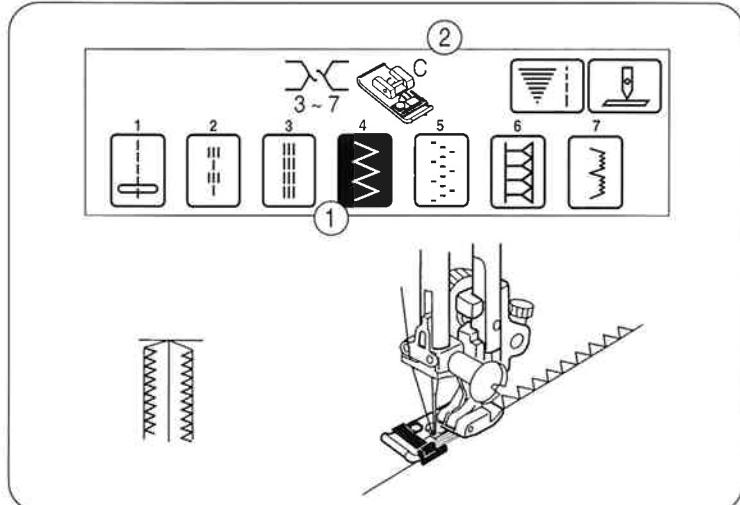
Turn the flywheel to position the needle to enter the right hole of the button. Readjust the stitch width if necessary.

Stitch several times.

After you finish sewing, cut the thread but leave 10 to 15 cm (4" to 6") of thread at the button.

Pull the thread to the reverse side of the fabric and tie the threads.

Raise the feed dog after sewing on buttons (see page 5).



Overcast Stitches

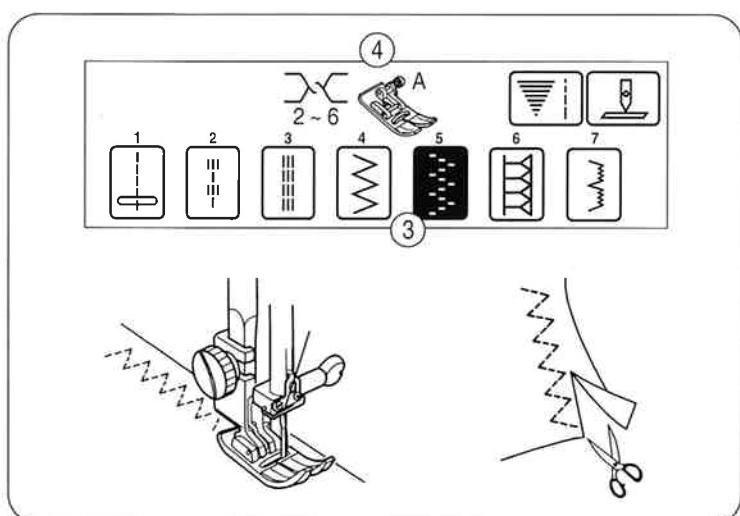
- **Zigzag Stitch**

This stitch can be used on most woven fabrics. It is the fastest way to finish an edge. The brush on the foot ensures the thread lies flat with no puckering.

① 4: Zigzag stitch

② C: Overlock foot

Do not set zigzag width lower than 5.0 when using overlock foot.



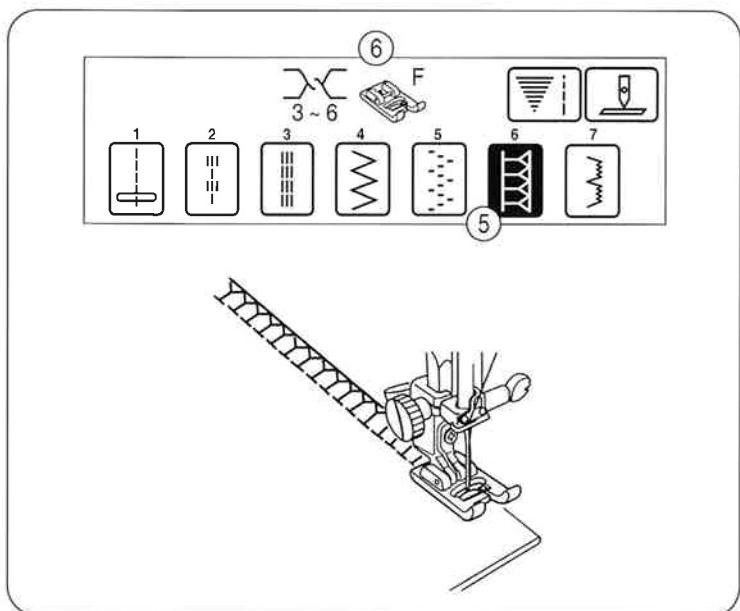
- **Multiple Zigzag**

This stitch is used to finish seam allowances on synthetics and other fabrics that tend to pucker. This stitch is excellent for darning and mending tears in fabric.

③ 5: Multiple zigzag stitch

④ A: Metal foot

Trim away excess seam allowance. Do not cut stitches.

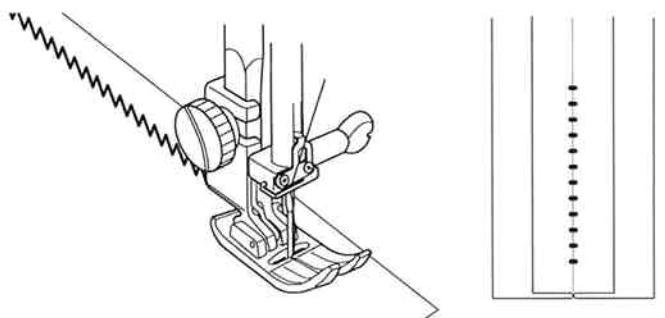
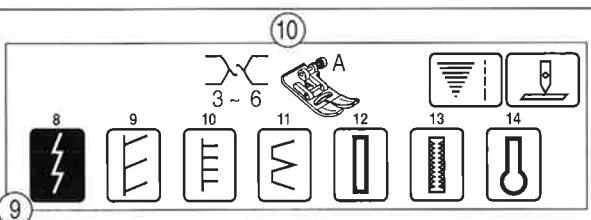
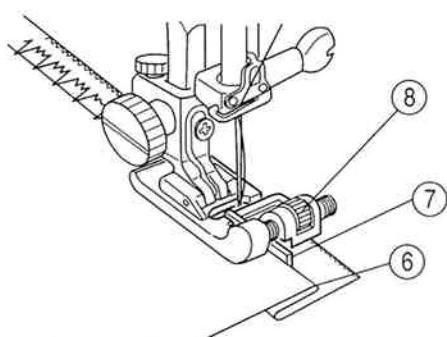
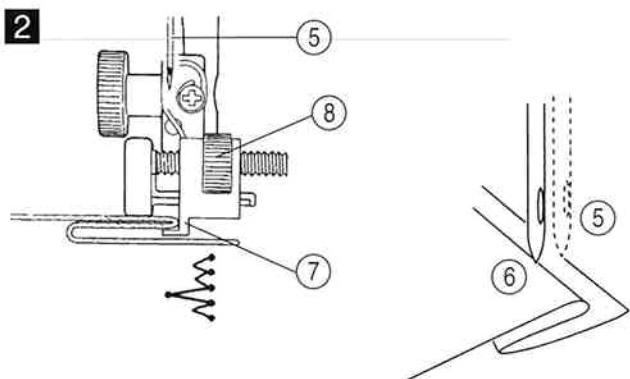
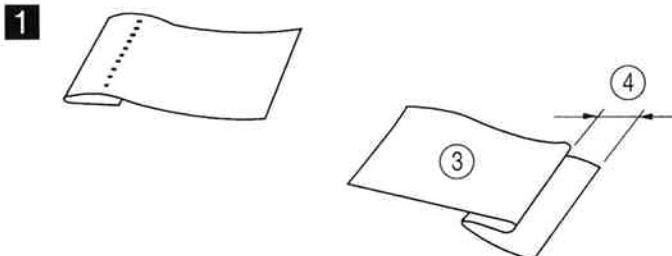
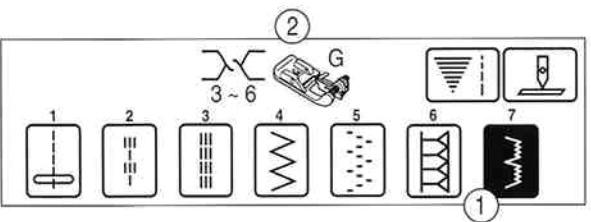


- **Super Overlock Stitch**

This industrial inspired overlock stitch is excellent for assembling and finishing all types of fabrics. Apply ribbing to knits and the garment retains its shape.

⑤ 6: Super overlock stitch

⑥ F: Satin stitch foot



• Blind Hem Stitch

- ① 7: Stretch blind hem
- ② G: Blind hem foot

1 Fold up the hem allowance and press. Fold under the hem toward right side of garment. Leave a 6.5-10 mm (1/4" to 3/8") extension at the right.

- ③ Wrong side of fabric
- ④ 6.5 - 10 mm (1/4" to 3/8")

2 Position the fabric so the folded edge is to the left side of the guide. Lower the presser foot. Make sure only the widest zigzag catches one or two fibers of the fold. By turning the adjustment nut ⑧, it is possible to move the guide to the right or left.

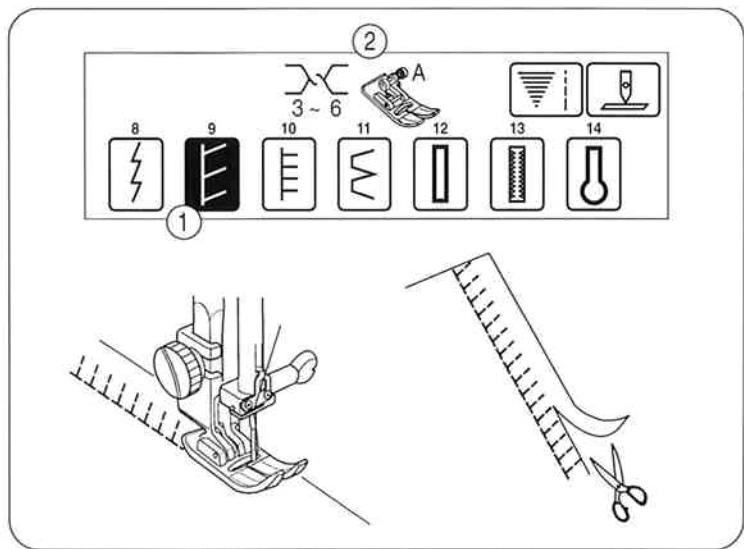
- ⑤ Needle on fabric
- ⑥ Needle catching hem
- ⑦ Guide
- ⑧ Adjustment nut

Press the key to move from screen A to screen B.

• Stretch Stitch

This stitch is a narrow stretch stitch designed to eliminate puckering on knit fabrics and bias seams, while permitting the seam to be pressed completely flat. The stitch can also be used to simultaneously seam and overcast when sewing on tricot and chiffons for a narrow, almost invisible seam or seam finish.

- ⑨ 8: Stretch stitch
- ⑩ A: Metal foot



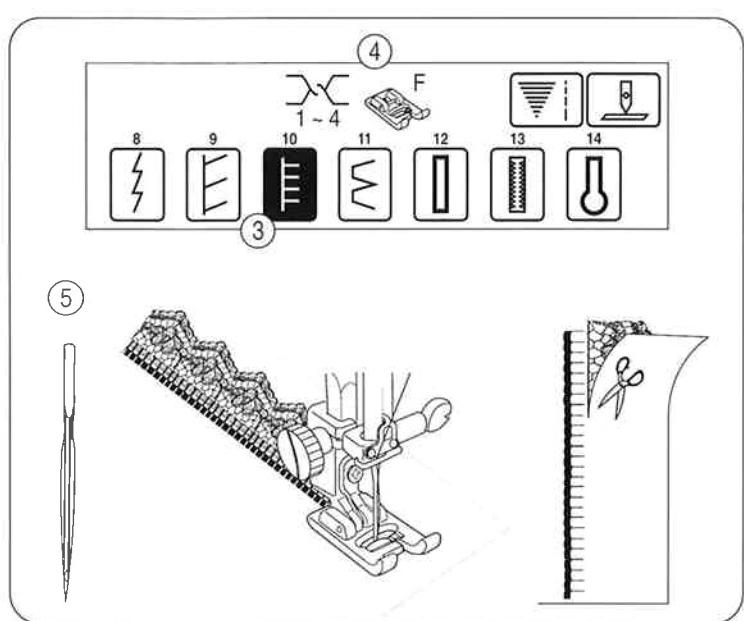
• Super Stretch Stitch

This stitch is recommended for sewing fabrics such as swimwear and stretch velour as it provides the greatest amount of stretchability and strength. Seams lie flat and do not lose their shape. Foot pressure dial may need to be changed to "2" for fabric to maintain its shape.

① 9: Super stretch stitch

② A: Metal foot

Trim away excess seam allowance. Do not cut stitches.



• Parisian Hemstitch or Pinstitch

Hemstitching, also known as French hand sewing, was traditionally only a hand sewn art. The Parisian hemstitch is a beautiful way to attach lace to fabric. Thread machine, needle and bobbin, with a fine cotton embroidery thread (50 weight or finer). Insert a universal needle size #110 or a wing needle.

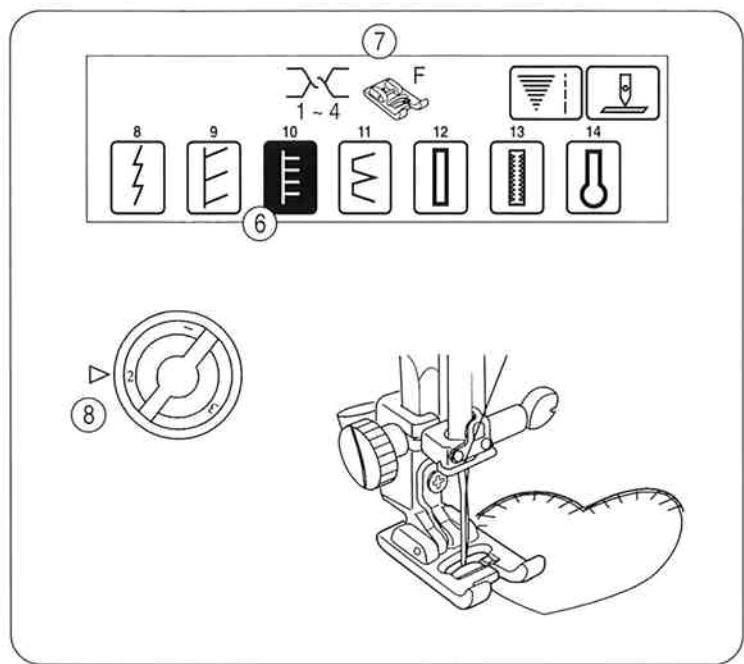
Use spray starch to stabilize lace and fabric. Lay lace header on fabric edge. Place fabric and lace under presser foot. The needle will sew seven straight stitches (forward, backward, forward, etc.) on the fabric. The eighth stitch will move sideways to catch the lace header and the ninth stitch will return the needle to sew next series of seven straight stitches. Depending on the style of lace, you may wish to narrow the stitch width. When sewing is complete, remove wing needle.

③ 10: Parisian hemstitch

④ F: Satin stitch foot

⑤ Wing needle

Trim away excess seam allowance. Do not cut stitches.



• Buttonhole Applique

Use fine cotton embroidery thread (50 weight or finer) and needle appropriate to fabric. You may need to set the foot pressure dial to 2.

In this type of applique, raw edges are folded under. To prepare the raw edge, first cut the applique design out of paper.

Press a fusible webbing to the wrong side of the fabric, then cut the fabric slightly larger than the paper pattern.

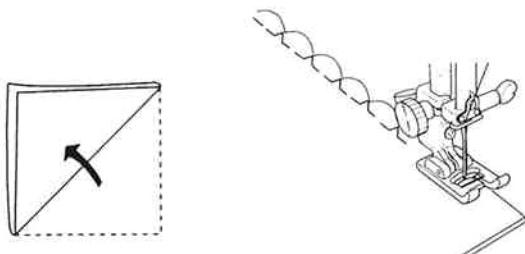
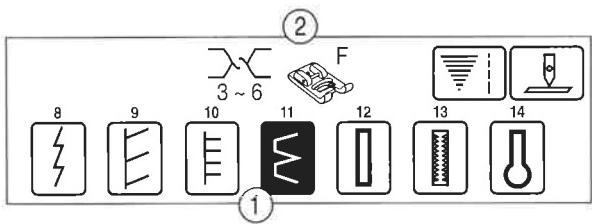
Fold the fabric under to match paper pattern size and press only the edge to form a perfectly shaped design.

Press the applique in place and sew. Straight stitch edge is sewn next to the folded edge of the applique.

⑥ 10: Buttonhole applique stitch

⑦ F: Satin stitch foot

⑧ Foot pressure dial (2)



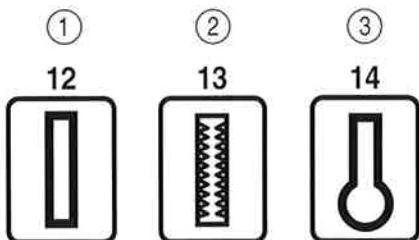
Shell Stitch

Use a lightweight fabric such as tricot. Fold and stitch on the bias. Set the stitch width and length as you desire. You may need to tighten the top thread slightly. Allow the needle to just clear the folded edge of the fabric when it swings off the fabric to the right.

If you sew rows of shell stitches, space the rows at least 1.5 cm (5/8") apart.

You can sew shell stitches in any direction on knits or soft silky wovens.

- ① 11: Shell stitch
- ② F: Satin stitch foot



Sensor Buttonholes

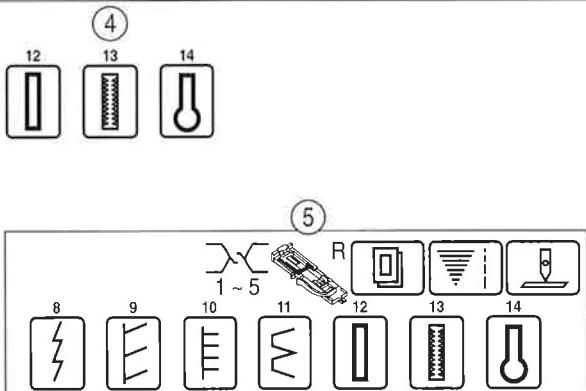
All buttonholes should use interfacing suitable for the fabric weight. This is especially important when sewing on stretch fabrics. There are three variations of sensor buttonholes:

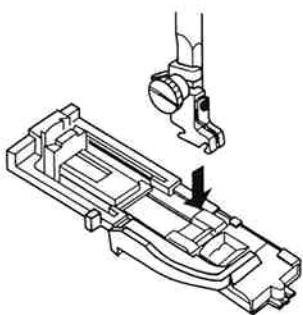
- ① **Classic Buttonhole**
For buttonholes on shirts and blouses.
- ② **Stretch Buttonhole**
For stretch fabrics.
- ③ **Keyhole Buttonhole**
For buttonholes on jackets.

Test sew the buttonhole on a sample swatch of the same fabric. Include the interfacing and any seam allowances that will be in the actual garment. This is very important to ensure the buttonhole style and fabric are compatible.

Press the key to select a buttonhole style. Alter the buttonhole width to match the fabric and thread. (See page 34.)

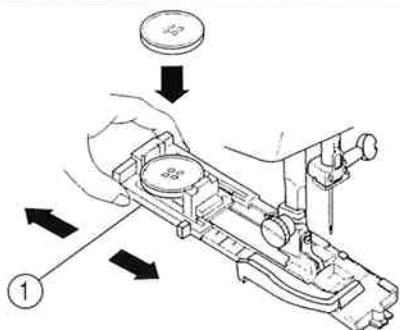
- ④ 12, 13 or 14
- ⑤ R: Automatic buttonhole foot





Sensor Buttonholes (cont'd)

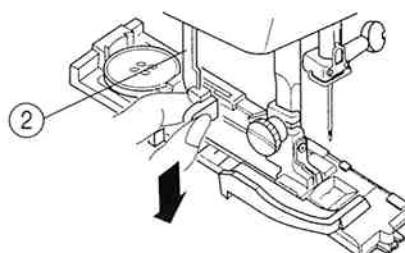
Attach the automatic buttonhole foot R. Make sure the button opening is at the back of the foot when it is attached.



Extend the button holder to the back and place the button in it. Push the holder together tightly around the button.

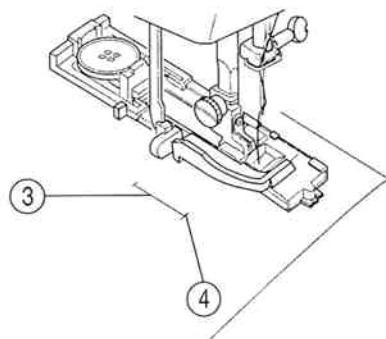
The size of the buttonhole is automatically set by placing the button in the automatic buttonhole foot. The button holder on the foot adjusts for a button up to 2.5 cm (1") in diameter.

① Button holder



Pull the buttonhole lever down as far as it will go.

② Buttonhole lever



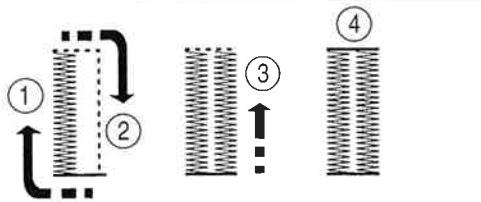
Place both threads to the left under the foot. Insert the garment under the foot and lower the needle at the starting point. Then lower the automatic buttonhole foot.

③ Mark buttonhole placement

④ Starting point

Press the foot control until the machine completes the buttonhole and stops by itself.

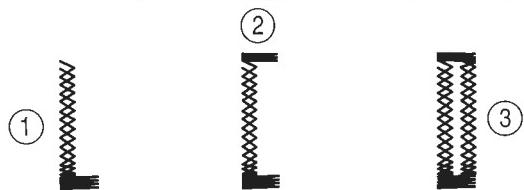
Sensor Buttonholes (cont'd)



#12 Classic Buttonhole

The buttonhole will automatically sew:

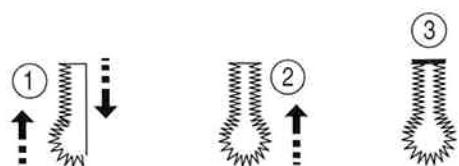
- ① the front bartack and zigzag on left side
- ② straight stitch on right side to front bartack
- ③ zigzag on right side
- ④ back bartack and stop.



#13 Stretch Buttonhole

The buttonhole will automatically sew:

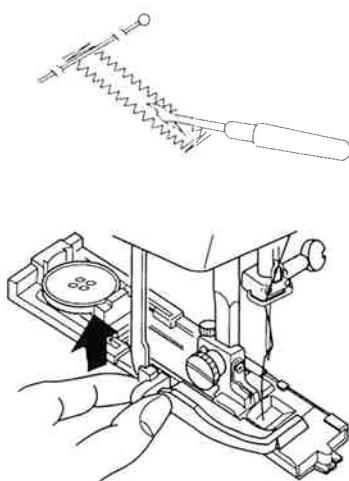
- ① the front bartack and zigzag on left side
- ② the back bartack
- ③ zigzag on right side and stop.



#14 Keyhole Buttonhole

The buttonhole will automatically sew:

- ① the front left half of keyhole, zigzag on left side, and straight stitch on right side to front
- ② front right half of keyhole and zigzag on right side
- ③ back bartack and stop.



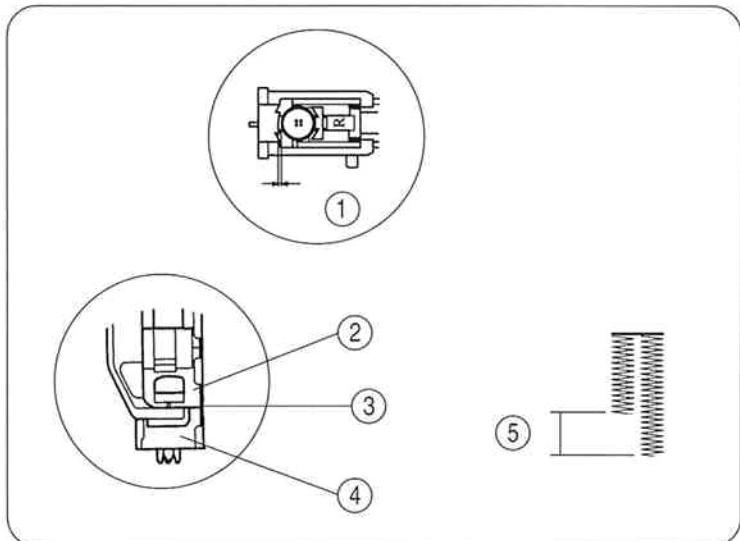
The machine signals you when the buttonhole is finished. The display message will read "Completed" and the machine will sound a series of beeps.

To sew another buttonhole, simply lift presser foot, move fabric and begin sewing next buttonhole.

To cut the buttonhole open, place a pin just inside the bartack (to prevent accidentally cutting bartack) and use a seam ripper.

When buttonhole sewing is finished, push the buttonhole lever upward as far as it will go.

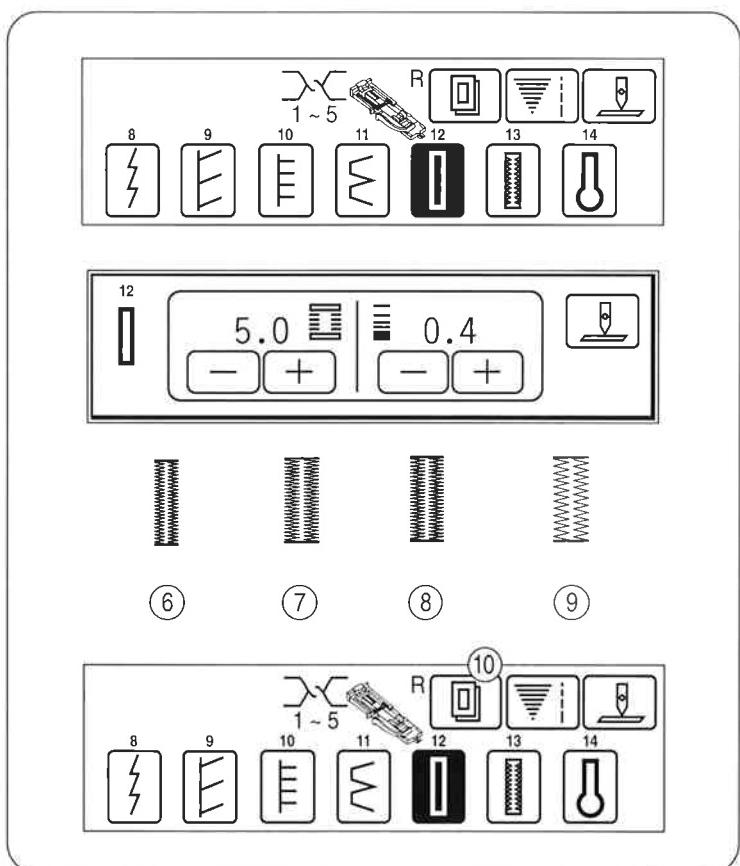
Sensor Buttonholes (cont'd)



If the button is extremely thick and difficult to fit through the test buttonhole, you can lengthen the buttonhole by pulling the button holder on the foot back a little extra. The length of the buttonhole will increase by that same amount.

- ① Button holder
- ② Slider
- ③ There should be no gap.
- ④ Spring holder
- ⑤ Incorrect buttonhole

Make sure there is no gap between the slider and spring holder. If there is a gap, the sides of the buttonhole will be different lengths (⑤).



How to Alter Buttonhole Stitch Width and Length

Press the key.

The pre-programmed stitch settings are shown on the screen.

Press the or key to alter the buttonhole

- ⑥ Narrow width
- ⑦ Wider width
- ⑧ Shorter stitch
- ⑨ Longer stitch

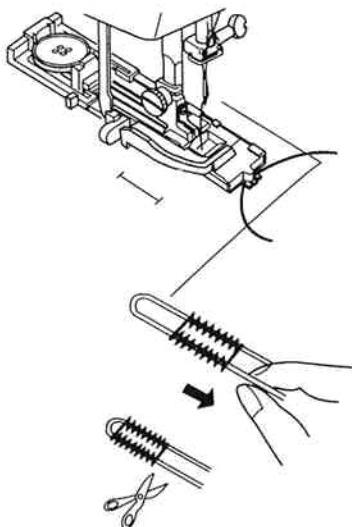
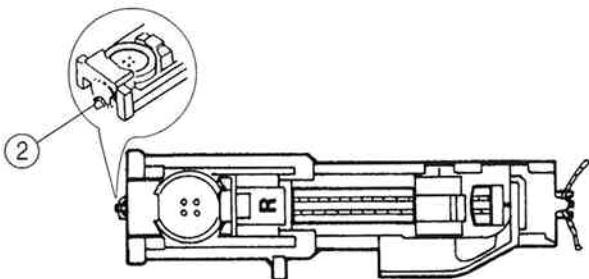
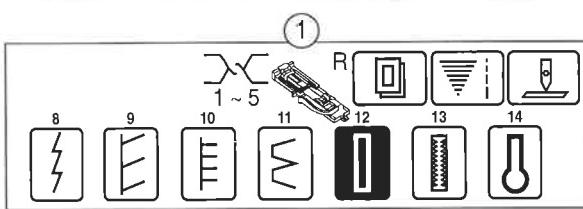
Press the key to return the display to Screen B.

Reinforced Buttonhole

There is another method for changing the density of the classic and keyhole buttonholes besides shortening stitch length.

Press the key before sewing starts. Sew, using same procedure as sensor buttonhole. The machine will automatically sew over the buttonhole twice and stop. The result is a reinforced buttonhole.

- ⑩ Reinforced buttonhole key



Corded Buttonhole

Sew a corded buttonhole using the same procedure described on pages 31-33 for a classic buttonhole style.

- Set the stitch width to match the thickness of the cording.

With the buttonhole foot raised, hook the filler cord on the spur at the back of the buttonhole foot. Bring the ends forward under the buttonhole foot.

Position the cord into the forks on the front of the foot to hold them tight.

- ① R: Automatic buttonhole foot
② Spur

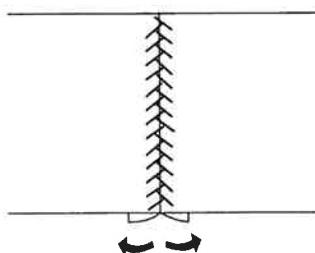
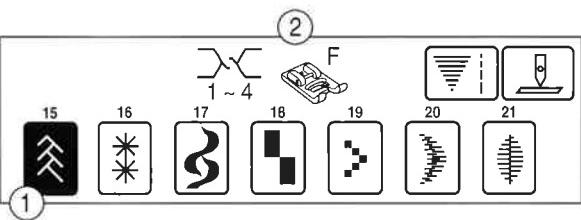
Lower the needle into the garment where the buttonhole will start and lower the presser foot.

Press the foot control and slowly sew the buttonhole. Each side of the buttonhole and the bartacks will be sewn over the cord. Remove the fabric from the machine and cut only the sewing threads.

Pull the left end of the cord to tighten it. Thread the end through a darning needle, draw to the wrong side of the fabric and cut.

Cut open buttonhole.

Press the key to move from Screen B to Screen C.

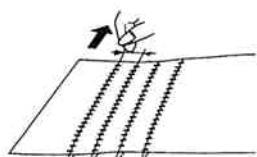
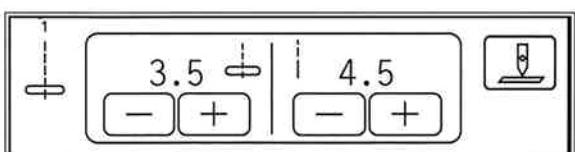
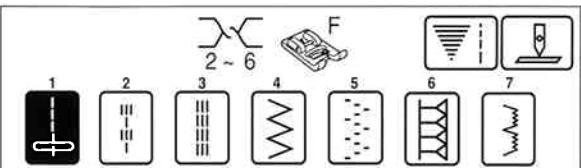


Patchwork

Sew a straight stitch seam and press seam allowance open. Sew patchwork stitch on right side of garment centering it over the seam line.

① 15: Patchwork stitch

② F: Satin stitch foot



③

Daisy Stitch for Smocking

Smocking is a delicate, decorative treatment on children's clothes or women's blouses. Choose a soft, lightweight fabric such as batiste, gingham or challis. Cut the fabric three times the finished width.

Press the key to move to Screen A. You will use straight stitch and set stitch length at 4.5.

Sew rows of straight stitches approximately 1 cm (3/8") apart, across the area to be smocked. (A looser needle thread tension will make gathering easier.) Tie the threads along one edge. Pull the bobbin threads and distribute the gathers evenly. Secure the threads at the other end.

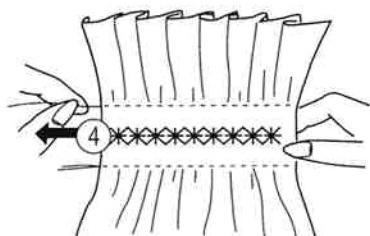
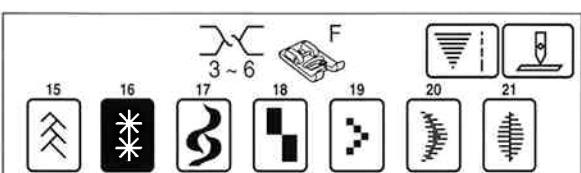
Press the key to move to Screen C.

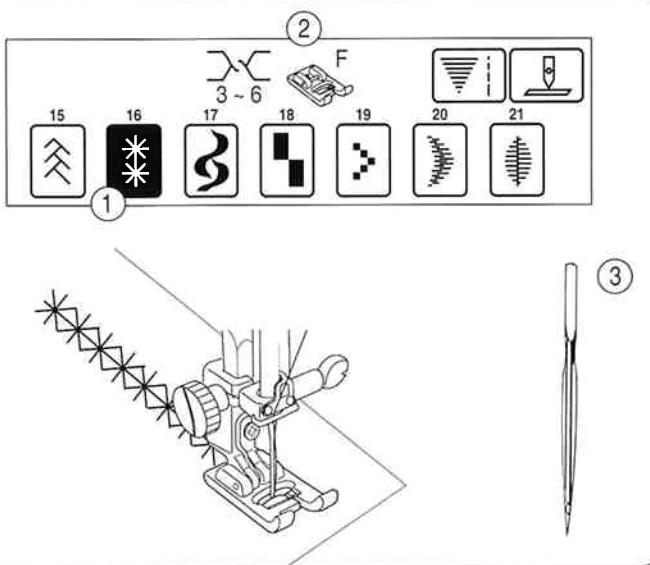
Select daisy stitch .

Reduce the tension and pressure if necessary and sew daisy smocking stitch between the straight seams. Pull out the gathering stitches.

③ Gathering lines – 1 cm (3/8") apart

④ Smocking stitch, remove gathering





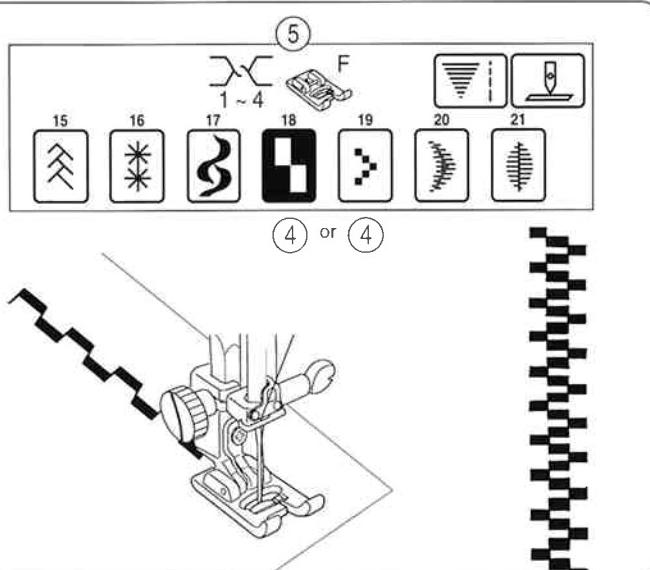
Daisy Hemstitch

The daisy hemstitch is a pretty, delicate design that looks beautiful in an heirloom garment or keepsake.

Thread machine, needle and bobbin, with a fine cotton embroidery thread (50 weight or finer). Insert a universal needle size #110 or a wing needle. Use spray starch to stabilize fabric.

- ① 16: Daisy stitch
- ② F: Satin stitch foot
- ③ Wing needle

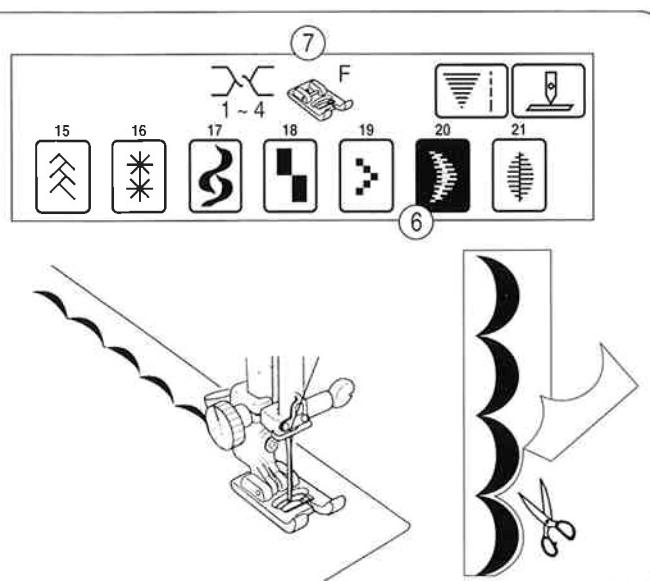
Remember to use the auto-lock key (a small key icon) when sewing final daisy to complete the stitch.



Decorative Satin Stitches

Add a decorative accent to your sewing. Express your creative talents by selecting stitches #17 through #21.

- ④ 18 or 19: Satin stitches
- ⑤ F: Satin stitch foot
- Remember to use stabilizer appropriate to the fabric.



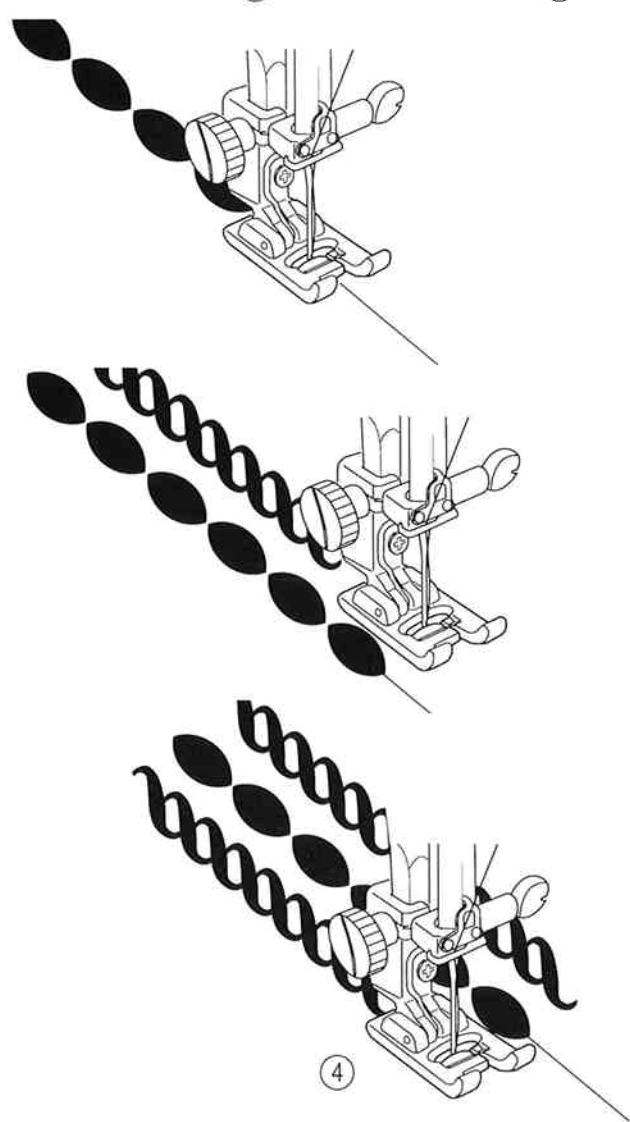
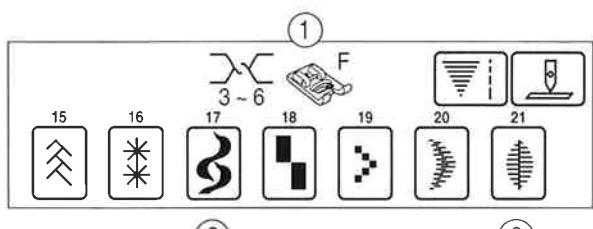
Scallop Edges

The scallop stitch can be used to attractively finish the edges of collars, pockets and placemats.

To edge a collar, place interfacing between upper and under collar and sew the scallop on the seam line.

After sewing, trim fabric close to stitching taking care not to cut the scallops.

- ⑥ 20: Scallop stitch
- ⑦ F: Satin stitch foot



Heirloom Insertion

Combinations of satin stitches and decorative stitches make eyecatching borders and insertions that can be varied according to taste and fabric.

- ① F: Satin stitch foot

Use a washable fabric marker to draw a straight line for insertion center.

- ② Select #21. Sew satin stitch over center line.

- ③ Select #17. Place foot edge to right side of first stitching row. Sew, using first row as guide.

- ④ Place foot edge to left side of first stitching row. Sew, using first row as guide.

Remember to use the auto-lock key to complete stitch.

SECTION IV

Hoop Embroidery

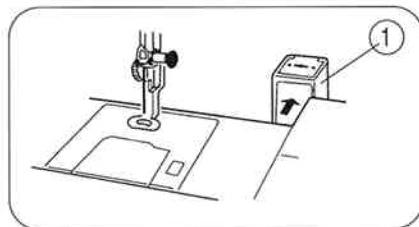
Getting Ready to Monogram and Embroider

- Before turning your machine on, clear your table surface of anything that might obstruct the carriage movement. If your machine is in a cabinet, check that the machine is even or above the cabinet surface. (The carriage could possibly hit the cabinet and disturb the sewing result.)

When monogram or embroidery is completed, before turning your machine off, press the  key to return carriage to its non-active position.

Do not turn the flywheel by hand while carriage is moving.

① Carriage



NOTE: In hoop embroidery sewing, the foot control cannot be used. Please use the start/stop button.

Selecting Needle and Thread

WEIGHT OF FABRIC	TYPE OF THREAD	TYPE OF NEEDLE	NEEDLE SIZE
Light, Medium	Size 40 or 50 Cotton machine embroidery thread, Rayon thread	Universal Ball Point Stretch Needle	11 (75)
Heavy	Size 30 or 40 Cotton machine embroidery thread, Rayon thread	Universal	14 (90)

Stabilizing Fabric

Stabilizers for embroidery work are available in two types: press-on or sew-in.

Use stabilizer on fabric wrong side. (More than one layer may be required.)

The sew-in type should be used when embroidering fabric which cannot be ironed, or sections which are difficult to iron.

For both types of stabilizers, prepare a piece larger than the embroidery hoop and place it in the hoop so the entire piece can be fastened within the hoop. (Fabric should be taut.)

NOTE: Ironing temperature varies with the kind of stabilizer and fabric.

Choosing Stabilizers:

For beautiful embroidery, it is important to use stabilizers properly.

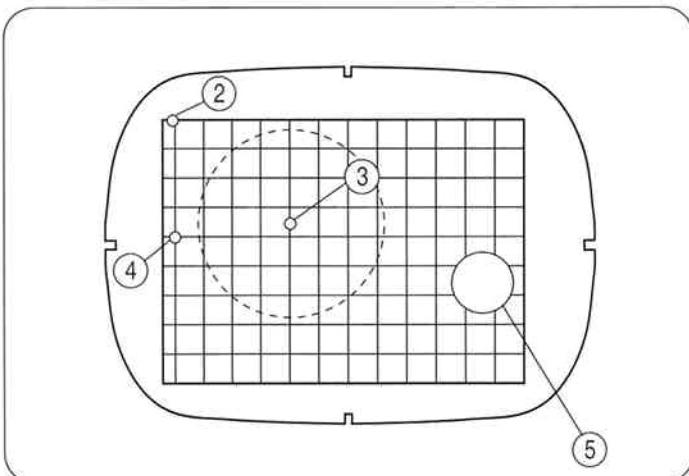
Press-on: For stretch fabric such as knits, lightweight and shrinkable fabric.

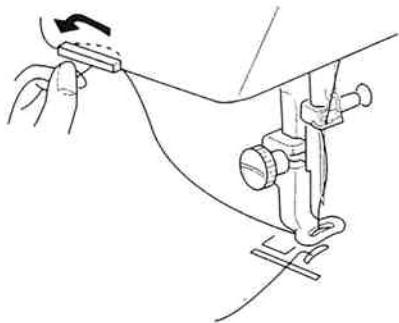
Sew-in: For sturdy fabrics and fabrics which cannot be ironed.

• Template

The illustration shows various starting points.

- ② Starting point for EnVision Card Nbrs. 2, 3, etc.
- ③ Starting point for EnVision Card series 100.
- ④ Starting point for monogramming
- ⑤ Remove Template hole

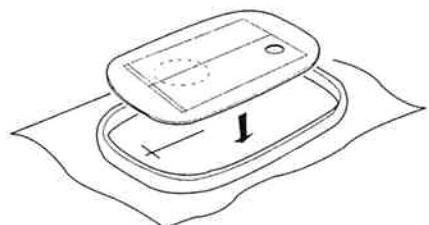
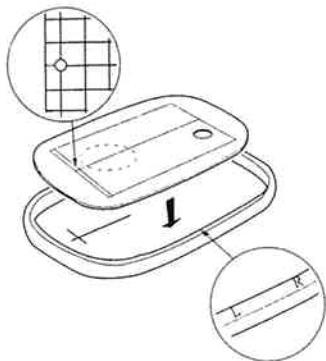
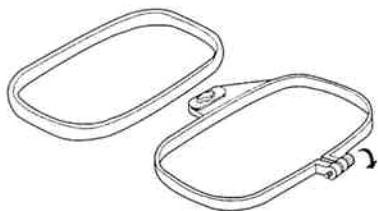
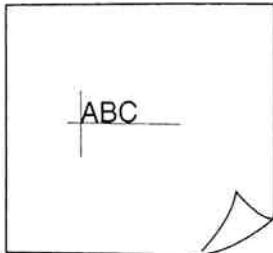




Machine Threading

Monogram and large pattern embroidery require you to use the P foot.

Thread the machine as described for traditional sewing (see pages 14-17). The needle thread is passed through the P foot hole and up to the front of the thread cutter, which acts as the thread holder. Leave 2 to 3 cm (1") thread tail dangling.



Securing Fabric in Embroidery Hoop

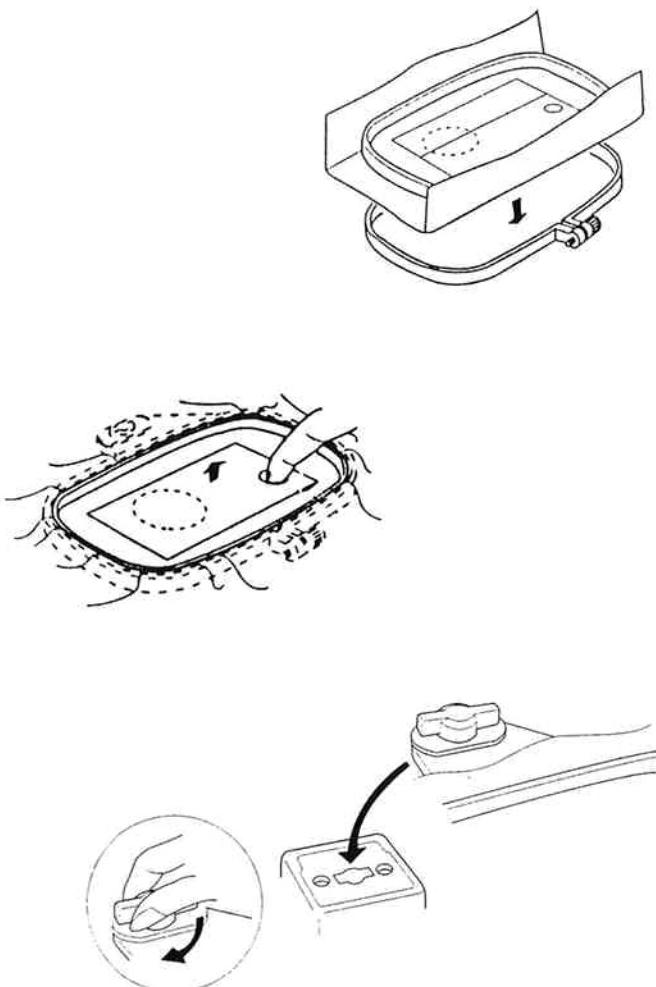
1. Use a washable fabric marker to mark reference lines for embroidery position.

2. Loosen the screw on the outer hoop and remove inner hoop.

3. Set the template inside the inner hoop.

NOTE: The L and R markings on the hoop should be visible and at the bottom when setting in the template.

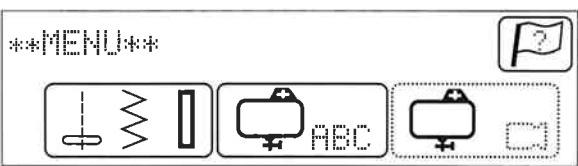
4. Place the inner hoop/template on top of fabric and stabilizer. Match the fabric reference lines with the template. Complete this step on a flat surface for accuracy.



5. Carefully lift inner hoop/template and fabric/stabilizer and set them into the outer hoop. Tighten screw on outer hoop. Check reference lines with template and adjust accordingly. Fabric should be held taut inside the hoop. Always pull fabric taut respecting the fabric grain (vertical and horizontal).

6. Remove template.

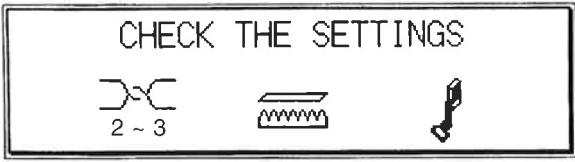
7. The hoop turn key should be parallel to the hoop. Position hoop on machine and place the prong into the carriage. Lock the hoop into position by moving the turn key clockwise.



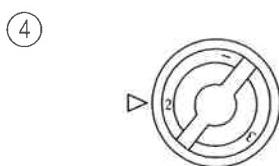
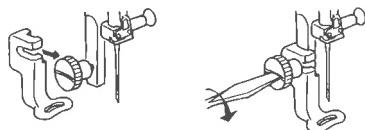
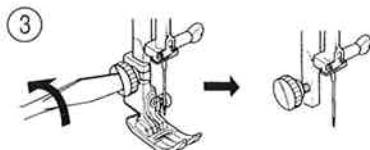
Built-in Monograms

The computer display screen should show the main menu. To activate the main menu, either turn machine on or press the key.

Press the monogram key and the carriage will move into position.



- (1)
- (2)
- (3)



- (3) Attach the "P" embroidery foot. Raise the presser foot. Loosen screw and remove shank. Position "P" foot and tighten screw.

In addition, set the foot pressure dial to "2".

- (4) Foot pressure dial



Select letter style (block or script).

The clothsetter key is used with the optional clothsetter. Directions on how to use this key are included with the clothsetter.

ABC



Press the **ABC** or **abc** key to select the letter style. (The letters will be displayed in uppercase.)

abc



Use the program panel keys to show the alternative letter style screens.

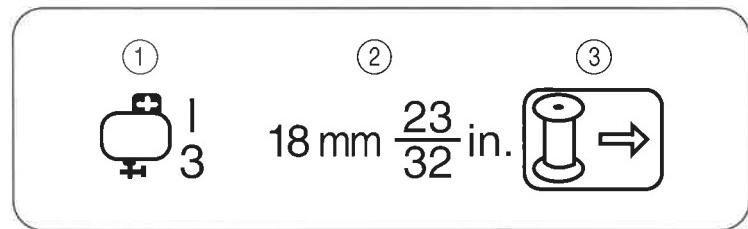
Press the key to display the diacritical letters (e.g., accents, umlauts).



Press the key to return to the English alphabet letters.

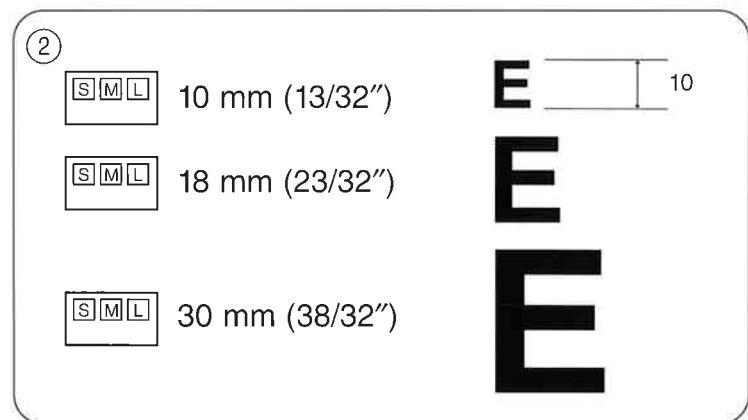


Press the key to choose either uppercase or lowercase letters.

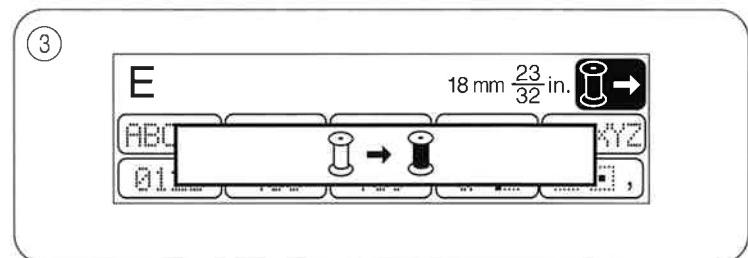


When the letter style screen appears, 3 new symbols are displayed.

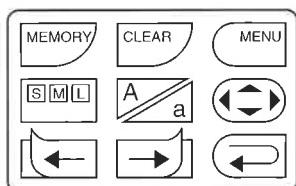
- The symbol indicates which numbered embroidery hoop to use. (Embroidery hoop 3 is optional.) When you begin to select specific letters, the symbol disappears.



- The letter size (height) is displayed on the screen in metric and inches. There are three sizes available: 10mm (13/32"), 18mm (22/32") and 30mm (38/32"). Press the program panel key to change the size. You must change size before selecting individual letters. The size will determine how many letters may be combined for words in a single line.



- Press the color select key and the key will darken to indicate that color select mode is on. The machine will automatically stop after sewing each letter, allowing you to switch needle thread color. You may press the key before or after programming. Press the key again to turn off color select mode.



ABCDE **MEMORY**
E

KLMNO **MEMORY**
EL

KLMNO **MEMORY**
ELN

ABCDE **MEMORY**
ELNA

Programming Letters and Numbers

Example: Block Style "ELNA"

1. Press the **ABCDE** key until "E" is displayed in the screen upper left corner.
2. Press **MEMORY** key to memorize the "E".
3. Press the **KLMNO** key until "L" is displayed.
4. Press **MEMORY** key.
5. Press the **KLMNO** key until "N" is displayed.
6. Press **MEMORY** key.
7. Press **ABCDE** key until "A" is displayed.
8. Press **MEMORY** key.

If you accidentally memorize the wrong character, press the **CLEAR** key.

9. Lower presser foot. Start by pressing **START/stop** key. Sew 5 or 6 stitches and stop by pressing start/**STOP** key.

Raise presser foot, cut needle thread tail close to fabric.

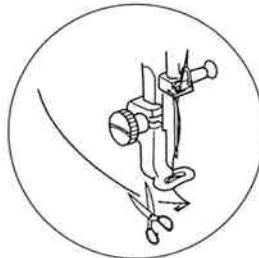
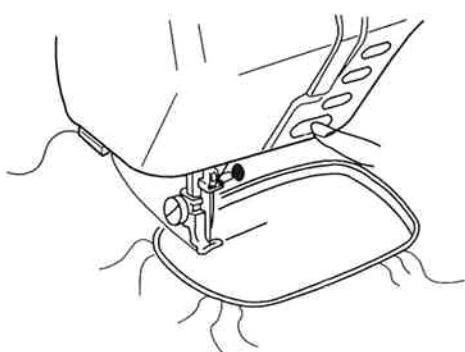
Lower presser foot.

Press start/stop key.

Machine will automatically stop after completing ELNA or E (color select key).

Do not remove hoop or fabric from machine.

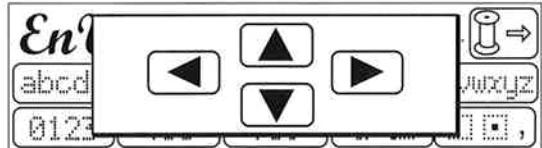
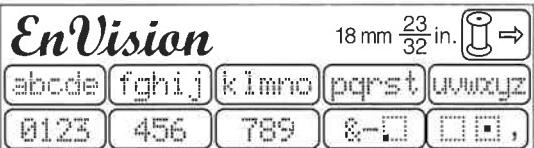
Press the **◀** key to display letter style screen.



ELNA

ABC

ABC



Programming Uppercase and Lowercase Letters

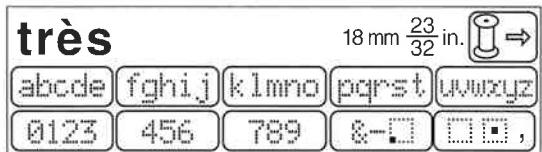
Example: Script Style “*EnVision*”

1. Press the **ABC** key.
2. Press the **ABCDE** key until “**E**” is displayed in the screen upper left corner.
3. Press the **MEMORY** key.
4. Press the **A/a** key to change display.
5. Press the **klmno** key until “**n**” is displayed.
6. Press the **MEMORY** key.
7. Press the **A/a** key to change display.
8. Press the **uvwxyz** key until “**v**” is displayed.
9. Press the **MEMORY** key.
10. Press the **A/a** key to change display.
11. Press the **fghi.j** key until “**i**” is displayed.
12. Press the **MEMORY** key.
13. Continue programming “*EnVision*” in same manner with lowercase letters.
14. Press the sewing and frame position key . Press the arrow key and move hoop position for a second line of letters/numbers.
(The sewing and frame position key is also used to correct hoop position after thread breaks while embroidering. See page 48.)
Press the key.
15. Sew “*EnVision*” below “ELNA.”

EnVision

ABC

ABC



Programming Diacritical Letter

Example: Block style/Lowercase “très”

Secure fabric in embroidery hoop

Press the key to display letter style screen.

1. Press the key.
2. Press the key until “T” is displayed in the screen upper left corner.
3. Press the key to change display for lower case.
4. Press the key.
5. Press the key until “r” is displayed.
6. Press the key.
7. Press the key.
8. Press the key until “é” is displayed.
9. Press the key.
10. Press the key.
11. Press the key until “s” is displayed.
12. Press the key.
13. Press start/stop key and sew “très”.

très



Thread Breaks While Embroidering

Press the start/STOP key to stop the machine after thread breaks or upon discovering a mistake in design placement. Raise presser foot.

Press the key.

There are now three options available for repositioning the hoop.

Beginning Key:

If you have started the machine and in the middle of sewing a word (or some other pattern) you want to reposition the hoop/fabric and sew again from the beginning of the word (pattern), press the key.

Frame Backward Key:

This key is used to reposition the hoop after the thread breaks. By pressing this key, you can move the hoop backward to the point where the thread broke.

- The hoop is moved backward 10 stitches each time the key is pressed.

Frame Forward Key:

Pressing this key moves the hoop forward without sewing. The key is used for correction when the hoop is moved backwards too far.

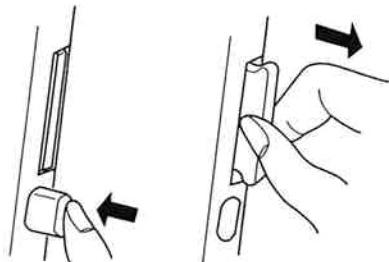
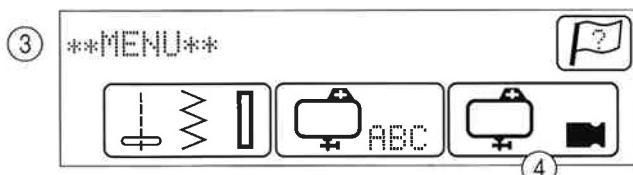
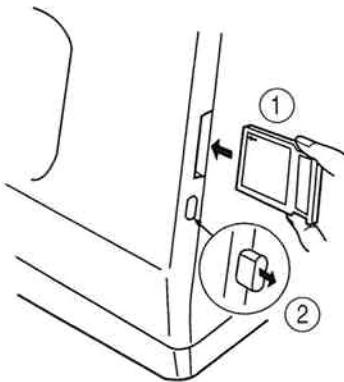
- The hoop is moved forward 10 stitches each time the key is pressed.

NOTE: Before pressing keys, make sure the needle is at its highest position.

Rethread the machine.

Press the key. You will probably need to press the key more than once to align the needle position to sew before the thread break.

Lower presser foot. Press **START/stop** key.



Large Pattern Embroidery with Optional EnVision Cards

Insert EnVision Card

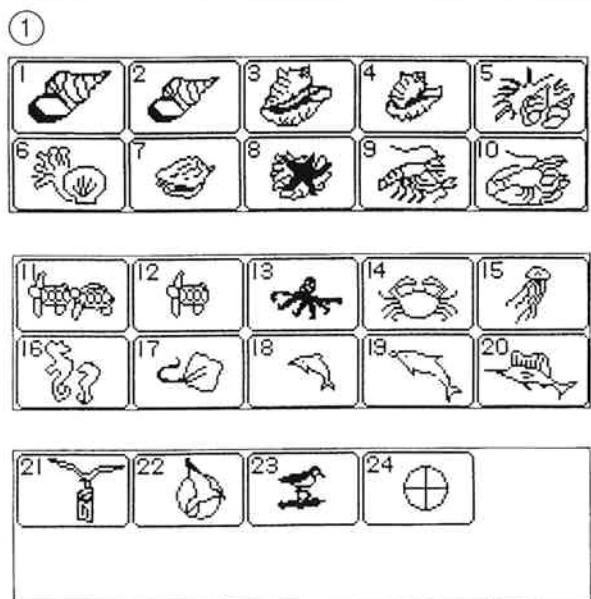
- ① Turn the machine off. Insert the card making sure the arrow on the label is facing you.
- ② Push the card straight in until it clicks and the eject button pops out (see illustration).
- ③ Turn the machine on. The menu screen appears.
- ④ Select the large pattern embroidery mode by pressing the key.
- ⑤ Settings reminder message is displayed for about 3 seconds. See page 42.

If the EnVision card is incorrectly inserted or not pushed in far enough, the eject button will not stick out.

Eject EnVision Card

Turn the machine off. Press the card eject button. The EnVision Card comes out halfway and may be safely removed.

NOTE: All messages stored on the EnVision Cards will read out in English only, regardless of which language is selected for machine operation. See page 13 to select machine language.

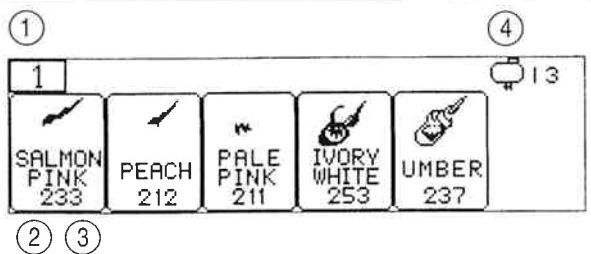


EnVision Card Sewing - 100 Series

Example: Card #104

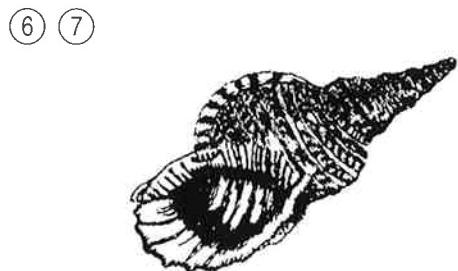
Use the and keys to view all design options.

- ① Select design 1.
- ② Display screen will indicate the suggested thread color for each section of the design.
- ③ Thread machine with color appropriate for first section.
- ④ Display indicates the hoop. Secure fabric in embroidery hoop. Mark fabric with reference lines; match them with template bull's-eye. Place fabric in hoop. Attach hoop to carriage. (See page 41.)



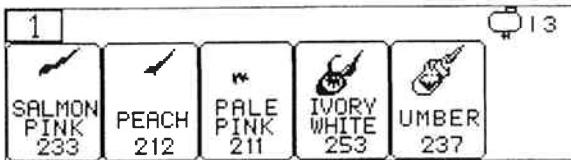
- ⑤ Template bull's-eye
- ⑥ Press **START/stop** key. Machine automatically stops so you can change thread color for next section.
- ⑦ Continue sewing design in same manner until it is complete.

Use program panels key in same manner as when sewing monogram mode.

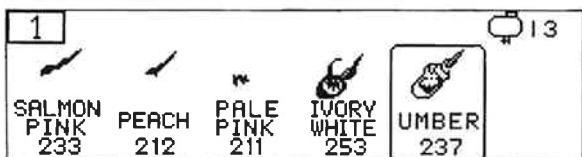


NOTE: Some sewers prefer their embroidery be very compact. Elna does not suggest sewing the design twice, but instead using a heavier thread weight. Sewing the design twice may result in skipped stitches.

①



②



③

How to Skip on 100 Series EnVision Cards

(You may sew a design section out of sequence.)

Example: Card 104

① Select design 1.

② You would like to sew only section 5. Press the key indicating section 4. The outline around sections 1, 2, 3 and 4 will disappear. The machine has skipped to section 5.

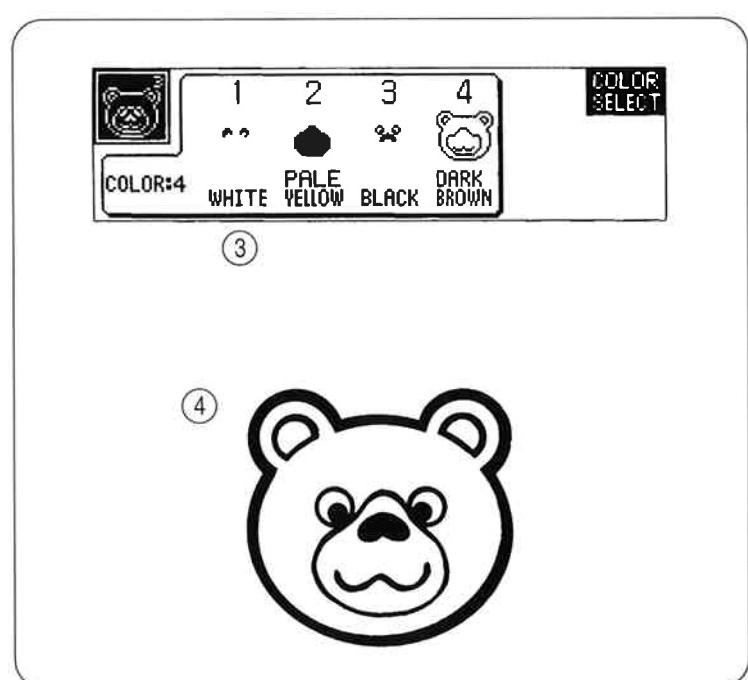
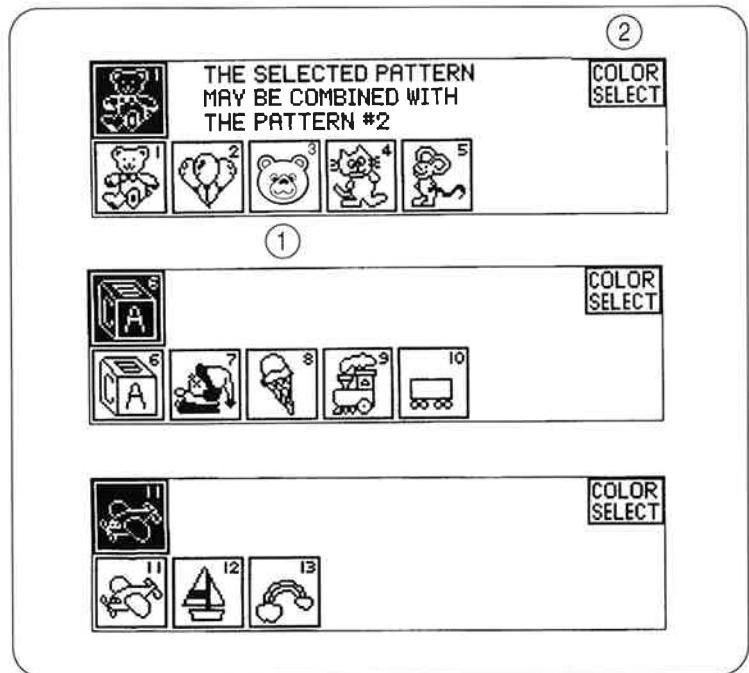
③ Thread machine and sew design section 5.

Re-hoop fabric or use sewing and frame position key to reposition hoop.

Sew the section again by pressing the **START/stop** key.

NOTE: Press the key to cancel the "skip" mode.

Press the key to cancel "skip" mode and to show other design options.



EnVision Card Sewing #1, #2, #3, etc.

Example: Card #8

Insert EnVision Card as described on page 49.

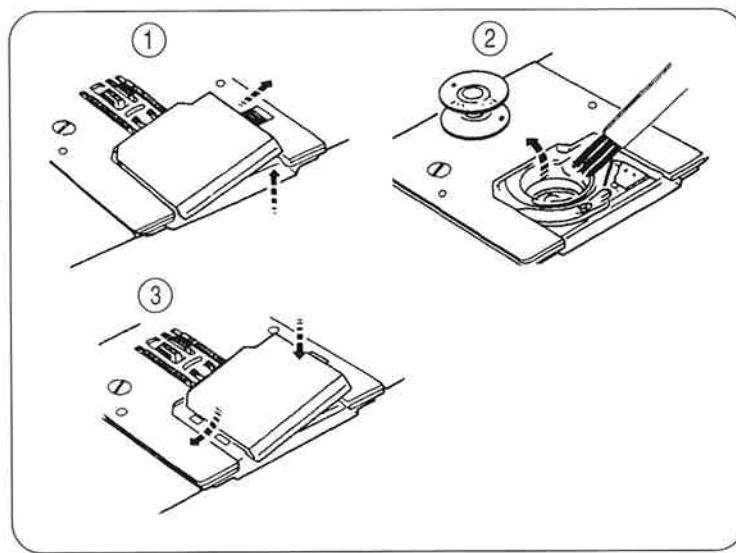
Use the and keys to view all design options.

- ① Select design 3.
- ② Press the color select key if it is shown as an option. Screen will show sewing sequence and suggested thread colors. (Some designs are either one or two colors and the color select key will not be shown.)
- ③ Press **START/stop** key. Machine will sew section 1 and automatically stop.
- ④ Change thread color and sew next section. Continue using same method until design is completed.

NOTE: Skipping is not an option with these cards. If you would like to sew sections out of sequence, you may allow the machine to run without needle and thread to achieve "skipping" mode.

Care of Your Machine

The Elna 8006 EnVision has been meticulously designed and manufactured to give you a lifetime of sewing pleasure. Do not store the machine in a high humidity area, near a heat radiator or in direct sunlight. The machine is self-lubricating, however, the area around the bobbin and hook must be cleaned each time the machine has had extensive use. Clean the outside of the machine with a soft cloth and pure soap.

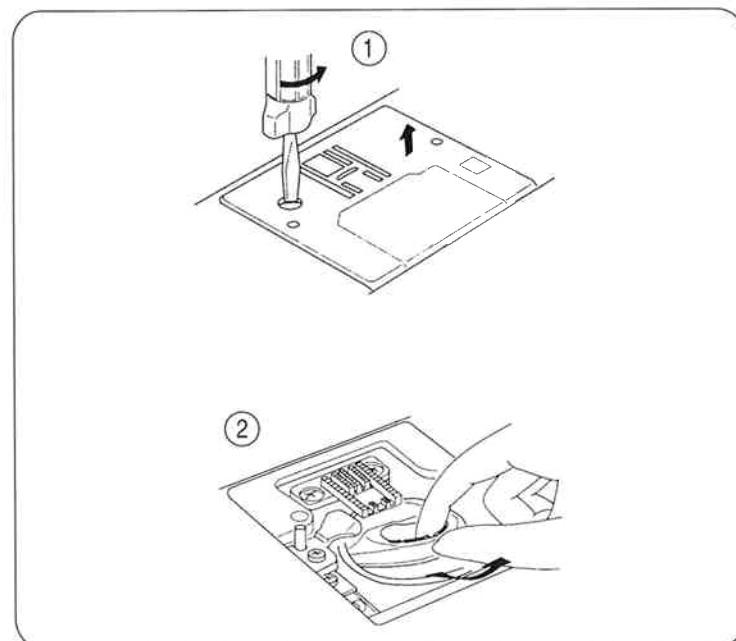


Cleaning the Bobbin Area

Loose threads and dust may cause puckered stitches and thread breakage during stitching. Check for lint buildup after each garment is completed.

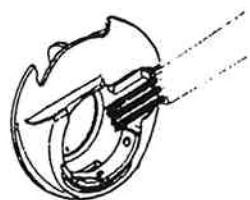
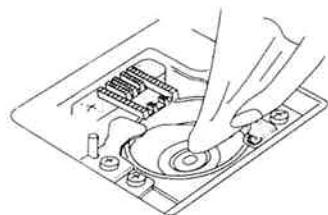
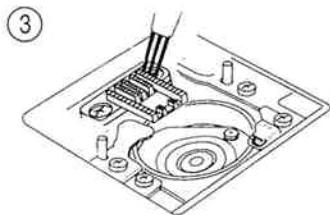
Press the up/down needle key until the needle is raised. Unplug the machine before cleaning.

- ① Remove the bobbin cover plate by sliding the bobbin cover plate release button to the right.
- ② Take out the bobbin, brush out dust and lint. (You may also use a small vacuum cleaner.)
- ③ Insert the bobbin and attach the bobbin cover plate.



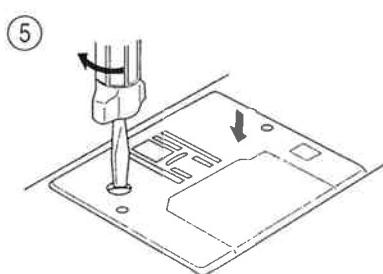
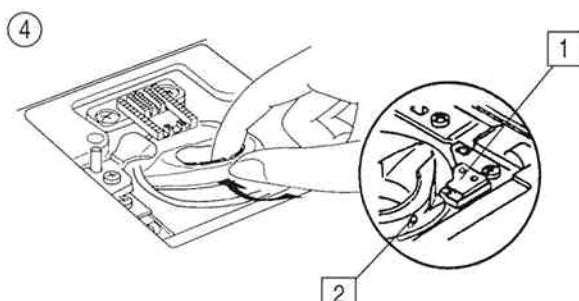
Cleaning the Hook Area and Feed Dog

- ① Remove the presser foot, bobbin cover plate, needle and bobbin. Remove the screw on the left side of the needle plate with the screwdriver supplied with the machine.
- ② Remove the needle plate. Lift up the bobbin case and remove it.



Cleaning the Hook Area and Feed Dog (cont'd)

- ③ Clean the feed dog and hook area with the lint brush. Wipe out gently with soft, dry cloth.
(You may also use a vacuum cleaner.)



Replacing the Bobbin Case

- ④ Insert the bobbin case so that the knob fits next to the stopper in the hook area.

① Stopper

② Knob

- ⑤ Replace the needle plate, inserting the two needle plate guide pins into the holes in the needle plate. Replace the screw.

After cleaning, be sure to replace the needle, presser foot and bobbin.

Troubleshooting

Condition	Type of Sewing	Cause	Reference
The machine is noisy.	All All All	1. Threads have been caught in the hook area. 2. The feed dog is packed with lint. 3. Slight humming sound coming from internal motor.	See pages 53-54. See pages 53-54. Normal
The needle thread breaks.	All All All All All Traditional Embroidery	1. The needle thread is not threaded properly. 2. The needle thread tension is too tight. 3. The needle is bent or blunt. 4. The needle is incorrectly inserted. 5. The thread is too heavy for the needle. 6. The needle thread and the bobbin thread are not placed back under the presser foot when starting to sew. 7. The needle thread is not in the thread holder when beginning embroidery sewing.	See page 16. See page 8. See page 7. See page 7. See page 12. See page 17. See page 40.
The bobbin thread breaks.	All All All	1. The bobbin thread is not threaded properly in the bobbin case. 2. Lint has collected in the bobbin case. 3. The bobbin is damaged and doesn't turn smoothly.	See page 15. See page 53. Use an undamaged bobbin.
The needle breaks.	All All All All All Traditional	1. The needle is incorrectly inserted. 2. The needle is bent or blunt. 3. The needle clamp screw is loose. 4. The needle thread tension is too tight. 5. The fabric and threads are not pulled to the back when sewing is finished. 6. The needle is too fine for the fabric being sewn.	See page 7. See page 7. See page 7. See page 8. See page 19. See page 12.
Computer display screen is not clear.	All	1. The lighting of the computer display screen is not adjusted properly.	See page 6.
The  key doesn't work.	Embroidery	1. The EnVision Card is not inserted properly.	See page 49.
 keys don't work.	Embroidery	1. The needle is in a lowered position.	See page 48.
Skipped stitches.	All All All All All Traditional Embroidery Embroidery Embroidery	1. The needle is incorrectly inserted. 2. The needle is bent or blunt. 3. The needle and/or threads are not suitable for the fabric being sewn. 4. A stretch needle is not being used for sewing stretch, very fine fabrics and synthetics. 5. The needle thread is not threaded properly. 6. The wrong needle is being used. 7. The foot pressure dial is not adjusted correctly. 8. The embroidery hoop is not attached properly. 9. The fabric is not pulled taut in the embroidery hoop. 10. You are trying to sew the design twice for heavy thread coverage.	See page 7. See page 7. See page 12. See page 12. See page 16. See page 12. See page 6. See page 41. See page 41. See page 50.

Troubleshooting (cont'd)

Condition	Type of Sewing	Cause	Reference
Seam puckering.	All All All Traditional Traditional Embroidery	1. The needle thread tension is too tight. 2. The needle thread or bobbin thread is not threaded properly. 3. The needle is too large for the fabric being sewn. 4. The stitch length is too long for the fabric. 5. The foot pressure dial is not adjusted correctly. * When sewing extremely lightweight materials, place stabilizer underneath the fabric. 6. The fabric is not pulled taut in the embroidery hoop.	See page 8. See page 15-16. See page 12. See page 20. See page 6. See page 41.
Slipping fabric.	Traditional Traditional	1. The presser foot dial is not adjusted correctly. 2. The correct presser foot is not being used.	See page 6. See computer display.
The fabric is not feeding smoothly.	Traditional Traditional Traditional Traditional Traditional Traditional	1. The feed dog is packed with lint. 2. The foot pressure dial is not adjusted correctly. 3. The stitches are too close. 4. The fabric is not fed when sewing begins. 5. The feed dog is lowered. 6. The correct presser foot is not used.	See page 53-54. See page 6. See page 20. See page 53-54. See page 5. See computer display.
The machine doesn't run.	All All All Traditional Embroidery	1. The machine is not plugged in. 2. A thread is caught in the hook area. 3. The control circuit is not working correctly. 4. The start/stop key is only used for hoop embroidery sewing. 5. The foot control is only used for traditional sewing.	See page 13. See page 53-54. Turn machine off and turn it on again. See page 13. See page 39.
Strange sound occurs when machine is switched on.	All All	1. Something is caught between the carriage and the machine. 2. The carriage is touching something around the machine.	Remove the object. See page 39.
Stitches are distorted.	All All Traditional Traditional Embroidery Embroidery Embroidery Embroidery Embroidery	1. The correct presser foot is not being used. 2. The needle thread tension is too tight. 3. The stitch length is not suitable for the fabric being sewn. 4. The fine adjustment dial is not set properly. 5. The embroidery hoop is not attached properly. 6. The carriage has bumped into something near the machine. 7. The fabric is not pulled taut in the embroidery hoop. 8. The end of the fabric is caught or being pulled when sewing embroidery. 9. The needle thread on wrong side of fabric is not cut correctly.	See computer display. See page 8. See page 20. See page 4. See page 41. See page 39. See page 41. Stop machine and free end of fabric. Cut extra needle thread on wrong side of fabric.
The automatic buttonhole stitches are not balanced.	Traditional Traditional Traditional	1. The stitch length is not suitable for the fabric being sewn. 2. Interfacing is not being used with fabrics. 3. There is a gap between the slider and spring holder.	See page 20. See page 31. See page 34.
Computer display keys don't work.	All Embroidery All All	1. The bobbin winder spindle is in the winding position. 2. The letter size and amount of characters are beyond the capacity of hoop. 3. The control circuit is not working correctly. 4. Traditional sewing or hoop embroidery modes have not been properly selected.	See page 14. See page 44. Turn machine off and turn it on again. See pages 18, 42 and 49.

OPERATING INSTRUCTIONS:

*The symbol "O" of a switch indicates the "off" position of a switch.
For appliances with a polarized plug(one blade wider than the other).*

To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.

"Foot Controller Model 21371 for use with Sewing Machine Model 8006"
(For U.S.A. market only)

— NOTES —

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